

pt 001

katsina mdg
cut-thru trauma

rvf 1020

s s f j (katsina)

female

27 yr

31.05.11

surgeon: kees waaldijk

assistant: kabir lawal

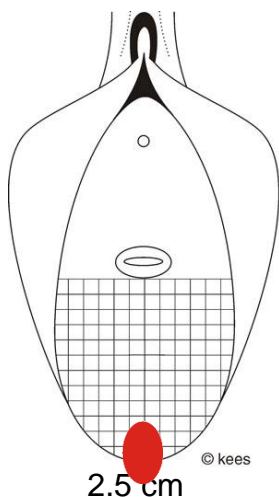
diagnosis: PVI (5 alive), sphincter ani rupture with 2.5 cm longitudinal anorectum trauma type **IIb, stool_flatus incontinence for 59 days** that started immediately following last labor of < 1 day, at home live male, married 14 yr ago pre(menarche 5 mth later), not living at husband, no menstruation, no drop foot R (grade 5) and L (grade 5), no vvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/**wide** pubic arch 95°, ar pos, operated 1x (jibia), never leaking urine
a/f 0 cm, i/v 11 cm 155.0 cm

operation: anorectum closure and sphincter ani_perineal body reconstruction

duration: 30 min (**step-by-step teaching**) healing 95% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

incision at pvw edge with freshening of sphincter ani ends, minimal sharp dissection, longitudinal anorectum closure with adaptation_rhaphy of internal sphincter over 3 cm up to anocutaneous junction (with repositioning of anterior anus) by double layer of inverting interrupted/continuous serafit, inner ring of external sphincter adapted, end-to-end external sphincter ani reconstruction by 2x serafit, perineal body repair with (in) direct re-union of transversus perinei muscles and (in)direct posterior re-union of bulbo cavernosus muscles by 2x serafit, perineum well adapted with anus in anatomic position, check on hemostasis
foley ch 18; free urine flow, euo/bw 13 cm, good elevation, euo/b 2 cm



	RR
preanesthesia:	120/80 mm Hg
5':	120/70
10':	120/70
postoperation:	120/70

pt 002

katsina mdg

vvf 8070

fixation sutures thru superior pubic bone periost

m h k (rép niger)

female

18 yr

31.05.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PII (all alive), cystocele_3° cervix prolapse_rectocele without genuine stress incontinence, something coming out of vagina_leaking urine for 3 yr which started spontaneously following obstructed first labor for 1 day, in hospital live female, married 6 yr ago pre(menarche 1 yr later), still living with husband, normal menstruation, drop foot R (grade 5) and L (grade 5), no vvf/rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/**wide** pubic arch 95°, ar pos, no decubitus ulcer cervix
euo/c 7 cm **never** leaking urine **narrow** urethra_euo in anat pos
no objective stress incontinence (also not after reduction)
euo/bw 14 cm, poor elevation, euo/b 1.5 cm 154.5 cm

operation: cervix suspension at L

duration: 15 min (**step-by-step teaching**) healing 95% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

small avw incision avw ruga fold with transverse extension up to cervix, sharp dissection to create wound area/surface, paravesical space free, fixation of cervix (with adherent pc fascia) onto L superior pubic bone/pc_iloc_ion/atf/atl by 2x seralon, euo/b 2.2 cm, **no** urine thru euo on rest/cough/pressure, foley ch 18, check on hemostasis; free clear urine flow, euo/bw 14 cm, good elastic anterior elevation at L, no rotational descent at all, euo/b 2.2 cm (**re-urethralization**) good cervix fixation
normal bladder capacity (longitudinal diameter 14-2.2 = 12 cm)
good position of uv-junction **against** middle third of symphysis
narrow 2 cm good-quality urethra_euo in anatomic position

RR

preanesthesia: 130/80 mm Hg

5': 120/70

10': 120/70

postoperation: 120/70

pt 003

katsina mdg
cut-thru trauma

rvf 1021

s n k (katsina)

female

29 yr

01.06.11

surgeon: kees waaldijk

assistant: kabir lawal

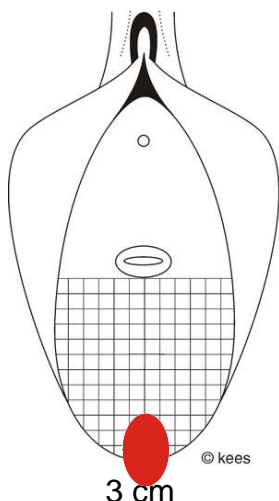
diagnosis: PVIII (7 alive), sphincter ani rupture with 3 cm longitudinal anorectum trauma, stool/flatus incontinence for 2 yr which started immediately following 7th labor for 1 day, at home live female, married 16 yr ago post(menarche 1 mth earlier), still living with husband, normal menstruation, drop foot R (grade 5) and L (grade 5), no vvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/**wide** pubic arch 90°, ar pos, **no** s/o operation
a/f 0 cm, i/v 12 cm never leaking urine 157.0 cm

operation: anorectum closure and sphincter ani_perineal body reconstruction

duration: 30 min (**step-by-step teaching**) healing 95% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

incision at pwv edge with freshening of sphincter ani ends, minimal sharp dissection, tension-free longitudinal anorectum closure with adaptation_rhaphy of internal sphincter over 3.5 cm up to anocutaneous junction (with repositioning of anterior anus) by double layer of inverting interrupted/continuous serafit, inner ring of external sphincter adapted, end-to-end external sphincter ani reconstruction by 2x serafit, perineal body repair with (in)direct re-union of transversus perinei muscles and (in)direct posterior re-union of bulbocavernosus muscles by 2x serafit, perineum well adapted with anus in anatomic position, check on hemostasis
foley ch 18; free urine flow, euo/bw 18 cm, good elevation, euo/b 2 cm



	RR
preanesthesia:	160/100 mm Hg
5':	150/90
10':	140/80
postoperation:	130/80

pt 004

katsina mdg

vvf 8071

anteriolateral R trauma: second obstetric fistula

h a d (katsina)

female

28 yr

01.06.11

surgeon: kees waaldijk

assistant: kabir lawal

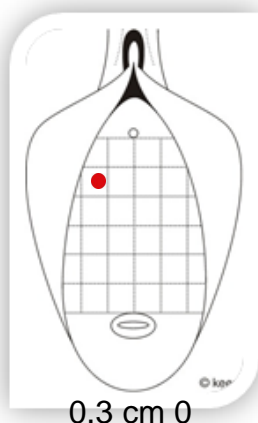
diagnosis: PVI (0 alive), **new** \pm 0.3 cm 0 urethrovesicovaginal fistula at R type **IIAa** within healed avw trauma/pcf defect, leaking urine for 1 yr that started immediately following obstructed last labor for 2 days, in hospital sb male, married 16 yr ago pre(menarche 1 yr), not living with husband, normal menstruation, no h/o drop foot R (grade 5) and L (grade 5), no rvf, no yan kan gishiri, no h/o eclampsia; normal ap diameter/pubic arch 85°, ar pos, cervix mobile, **successful** vvf-repair delivery II (b/r_), 5x1.5 cm pcf defect with cystocele ++, atf/atl + pc_ilcm loss at R
 euo/f 1.5 cm, f/c 4 cm, i/v 11 cm 156.0 cm

operation: uvvf-repair with transverse pcf repair/bilateral fixation

duration: 25 min healing 95% continence 90%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision thru/fistula_pcf defect edge, sharp dissection, tension-free transverse pc fascia repair/ by single layer of inverting serafit with bilateral fixation onto para urethra_euo atf/symphysis, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 12 cm, anterior elevation, euo/b 1.6 cm normal bladder capacity (longitudinal diameter 12-1.6 = 10.5 cm) poor position of uv-junction **against** caudad third of symphysis **no** longer cystocele normal-width 1.5 cm good-quality urethra_euo in anatomic position



	RR
preanesthesia:	130/80 mm Hg
5':	120/70
10':	120/70
postoperation:	120/70

pt 005

katsina mdg
anterior trauma

vvf 8072

m h d (katsina)

female

15 yr

01.06.11

surgeon: dr sadiya nasir/kees waaldijk

assistant: kabir lawal

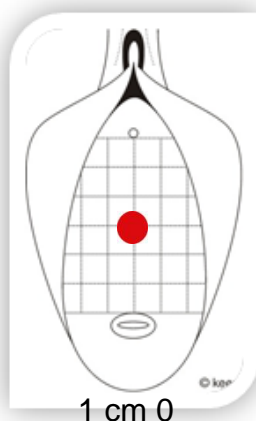
diagnosis: PI (0 alive), \pm 1 cm 0 urethrovesicovaginal fistula type **IIAa** midline, **leaking urine for 78 days** which started immediately following cs bco obstructed labor for 1 day, sb female, married 1 yr ago post(menarche 1 yr earlier), not living with husband, no menstruation, drop foot R (grade 4) and L (grade 3), no rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter /pubic arch 85°, ar pos, cervix mobile **wide open** urethra_euo euo/f 2 cm, f/c 2 cm, i/v 11 cm 149.0 cm

operation: uvvf-repair

duration: 40 min (**personal supervision**) healing 85% continence 90%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

episiotomy L, transverse incision thru/at fistula edge, sharp dissection, tension-free transverse bladder/urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, ballooning of foley ch 18, transverse avw/avw_ cervix adaptation by 2x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 10 cm, good anterior elevation, euo/b 2.0 cm
normal bladder capacity (longitudinal diameter 10-2.0 = 8 cm)
acceptable position of uv-junction **against** middle/caudad third of symphysis
normal-width 2 cm medium-quality urethra_euo in anatomic position



RR
preanesthesia: 120/70 mm Hg
5': 120/60
10': 120/60
postoperation: 110/60

pt 006

katsina mdg
anterior trauma

vvf 001

h s s (katsina)

female

28 yr

01.06.11

surgeon: dr idris a halliru

assistant: kabir lawal

diagnosis: PIV (3 alive), ± 3x2 cm transverse urethrovesicovaginal fistula type **IIAa**, leaking urine for 3 mth which started immediately following obstructed last labor for 2 days, in hospital sb male, married 15 yr ago pre(menarche 4 mth later), not living with husband, no menstruation, drop foot R (grade 4) and L (grade 4), no rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/pubis arch 85°, ar pos, cervix mobile
euo/f 2 cm, f/c 4 cm, i/v 12 cm 160.0 cm

operation: bilateral ureters, uvvf-repair + transverse pcf repair/bilateral fixation

duration: 35 min healing 95% continence 95%

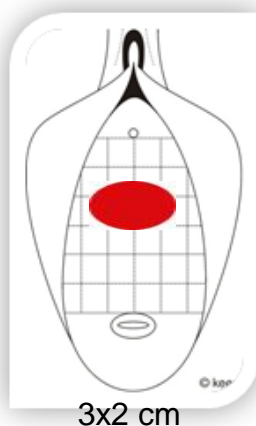
anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

bilateral ureter catheterization for 20 cm, incision at fistula edge, sharp dissection, tension-free transverse bladder/urethra closure by single layer of inverting serafit with transverse fascia repair/bilateral fixation, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 3x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 11 cm, good anterior elevation, euo/b 2 cm

normal bladder capacity (longitudinal diameter 11-2 = 9 cm)

acceptable position of uv-junction **against** middle/caudad third of symphysis

normal-width 2 cm good-quality urethra_euo in anatomic position



	RR
preanesthesia:	130/90 mm Hg
5':	130/80
10':	120/70
postoperation:	120/70

pt 007

katsina mdg
anteriolateral trauma R

vvf 002

h t d (katsina)

female

42 yr

01.06.11

surgeon: dr idris a halliru

assistant: gambo lawal

diagnosis: PXIV (9 alive), \pm 2 cm 0 urethrovesicovaginal fistula type I at R, **leaking urine for 76 days** which started immediately following obstructed last labor for 1 day, in hospital sb female, married 30 yr ago pre(menar che 1 yr later), still living with husband, no menstruation, drop foot R (grade 4) and L (grade 4), no rvf, no yankan gishiri, no h/o eclampsia; nor mal ap diameter/pubis arch 85°, ar pos, cervix fixed midline
euo/f 5 cm, f/c 1 cm, i/v 12 cm

152.0 cm

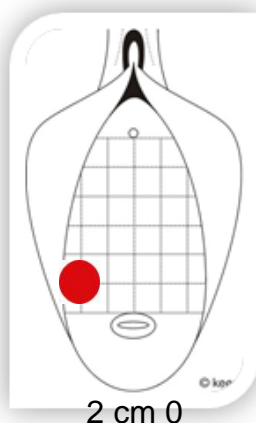
operation: catheterization R ureter and vvf-repair

duration: 25 min

healing 95% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

catheterization R ureter for 20 cm, incision at fistula edge, sharp dissection, tension-free transverse bladder closure by single layer of inverting serafit, **no** urine thru suture line/ euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 12 cm, moderate anterior elevation, euo/b 3 cm
normal bladder capacity (longitudinal diameter 12-3 = 9 cm)
good position of uv-junction **against** middle third of symphysis
normal-width 3 cm good-quality urethra_euo in anatomic position



RR
preanesthesia: 140/80 mm Hg
5': 140/80
10': 130/80
postoperation: 130/80

anterior + iatrogenic trauma

h u s (kaduna)

female

20 yr

01.06.11

surgeon: dr said ahmad/dr idris a halliru

assistant: gambo lawal

diagnosis: PII (1 alive), **multiple two** \pm 1 cm 0 urethrovesicovaginal fistula type **IIAa** midline and \pm 0.5 cm 0 cs-vcvf slightly at R, leaking urine for 3 yr which started immediately following cs bco obstructed last labor of 7days, sb female, married 8 yr ago pre(menarche 1 yr later), not living with husband, no menstruation since, drop foot R (grade 4-5) and L (grade 4-5), no rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/pubis arch 85°, ar pos, cervix (?stump?) retracted
euo/f 2 cm, f/f 3 cm, f/c 0 cm, i/v 12 cm 154.0 cm

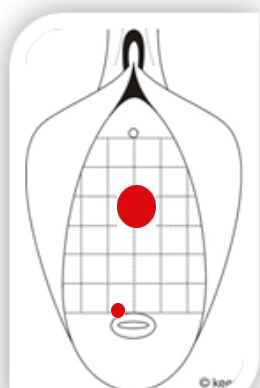
operation: uvvf-repair + cs-vcvf-repair

duration: 65 min

healing 90% continence 90%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision thru/at uvvf edge, sharp dissection, tension-free transverse bladder/urethra closure by single layer of inverting serafit, transverse incision thru cs-vcvf, sharp dissection, tension-free transverse bladder closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon transverse avw/cervix adaptation by 2y everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 11 cm, good anterior elevation, euo/b 2 cm
normal bladder capacity (longitudinal diameter 11-2 = 9 cm)
acceptable position of uv-junction **against** middle/caudad third of symphysis
normal-width 2 cm good-quality urethra_euo in anatomic position



1 cm 0 + 0.5 cm 0

	RR
preanesthesia:	130/80 mm Hg
5':	120/70
10':	120/70
postoperation:	120/70

pt 010

katsina mdg

vvf 004

anterior trauma; nb postpoliomyelitis syndrome R leg

a i z (katsina)

female

28 yr

01.06.11

surgeon: dr said ahmad

assistant: gambo lawal

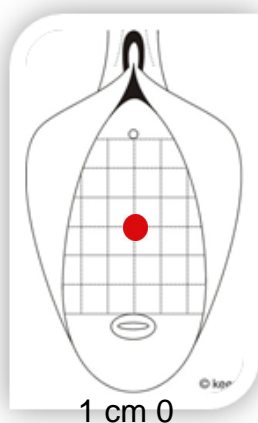
diagnosis: PIX (0 alive), \pm 1 cm 0 urethrovesicovaginal fistula type **IIAa** at midline, leaking urine for 6 mth which started immediately following cs bco last obstructed labor for 3 days, sb female, married 15 yr ago post(menarche 1 mth earlier), still living with husband, normal menstruation, drop foot R (grade) and L (grade), no rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/pubis arch 85°, ar pos, cervix fixed midline
euo/f 3 cm, f/c 3 cm, i/v 12 cm 123?? cm

operation: **complicated** uvvf-repair + bilateral fascia fixation

duration: 60 min healing 85% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision thru/at fistula edge, sharp dissection, tension-free transverse bladder/urethra closure by single layer of inverting serafit with bilateral fixation of pc fascia, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 2.5 cm
normal bladder capacity (longitudinal diameter 12-2.5 = 9.5 cm)
good position of uv-junction **against** middle third of symphysis
normal-width 2.5 cm good-quality urethra_euo in anatomic position
complicated bco postpoliomyelitis syndrome



RR
preanesthesia: 120/70 mm Hg
5': 110/70
10': 100/70
postoperation: 100/70

pt 011

katsina mdg

vvf 8073

fixation sutures thru superior pubic bone periost

d i g m (rép niger)

female

48 yr

02.06.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PVII (5 alive), cystocele_3° cervix prolapse_rectocele without genuine stress incontinence, something coming out of vagina_leaking urine for 10 yr which started spontaneously following obstructed last labor for 1 day, at home live male, married 35 yr ago post(menarche 3 mth earlier), still living with husband, menopause 5 yr ago, drop foot R (grade 5) and L (grade 5), no vvf/rvf, no yankan gishiri, no eclampsia; normal ap diameter/**wide** pubic arch 95°, ar pos, small decubitus ulcer posterior cervix euo/c 9 cm **never** leaking urine **narrow** urethra_euo in anat pos **no** objective stress incontinence (also not after reduction) euo/bw 17 cm, poor elevation, euo/b 1.5 cm, i/v 11 cm 155.0 cm

operation: cervix suspension at L

duration: 30 min (**step-by-step teaching**) healing 95% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

small avw incision avw ruga fold with transverse extension up to cervix, sharp dissection to create wound area/surface, paravesical space free, fixation of cervix (with adherent pc fascia) onto L superior pubic bone/pc_iloc_iom/atf/atl by 2x seralon, euo/b 2.4 cm, **no** urine thru euo on rest/cough/pressure, foley ch 18, check on hemostasis; free clear urine flow, euo/bw 17 cm, good elastic anterior elevation at L, slight rotational descent at R, euo/b 2.4 cm (**re-urethralization**) good cervix fixation **increased** bladder capacity (longitudinal diameter 17-2.4 = 14.5 cm) good position of uv-junction **against** middle third of symphysis normal-width 2.5 cm good-quality urethra_euo in anatomic position

RR

preanesthesia: 130/80 mm Hg

5': 130/80

10': 130/80

postoperation: 130/80

pt 012

katsina mdg
iatrogenic trauma

vvf 8074

h y b (rép niger)

female

69 yr

02.06.11

surgeon: kees waaldijk

assistant: kabir lawal

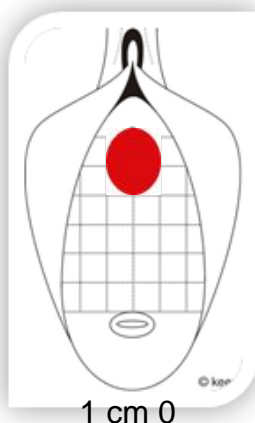
diagnosis: P0, **mutilated** ± 1 cm urethrovesicovaginal fistula type **IIa**, leaking urine for 20 yr (probably far longer) which started immediately following yankan gishiri by wanzami bco cystocele, native medicine, married 57 yr ago pre(menarche 1 yr later), still living with husband, menopause 25 yr ago, drop foot R (grade 5) and L (grade 5), no rvf; ?ap diameter?normal /pubic arch 85°, ar pos, cervix not identified RE/ streak uterus probably congenital vagina agenesis, abd op + 1x repair (b/r_) **lying/she_wanzami/aska/tissue removed (-ectomy)**
euo/f 0 cm, f/v 2 cm, i/v 2.5 cm **ba hanya ko kadan** 166.0 cm

operation: "continent urethra/fascia/avw reconstruction"

duration: 25 min healing 85% continence 50%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

wide H incision around fistula, sharp dissection, sharp mobilization of (para)urethra tissue, tension-free longitudinal urethra rhapsy/reconstruction over 2.5 cm by single layer of inverting interrupted serafit, bilateral fixation of pc fascia onto paraurethra_euo atf/symphysis by 2x serafit each side, euo/b 2.2 cm, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, avw reconstruction by avw advance ment flap by 2-point fixation onto para_euo atf by 1x everting seralon each side, check on hemostasis; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 2.2 cm normal bladder capacity (longitudinal diameter 12-2.2 = 10 cm) good position uv-junction **against** middle third symphysis normal-width 2 cm poor-quality urethra_euo in anatomic position the **problem: fibrosis/scar tissue +++**



RR
preanesthesia: 160/100 mm Hg
5': 140/90
10': 130/80
postoperation: 130/80

pt 013

katsina mdg
anterior trauma

vvf 8075

r a g (katsina)

female

23 yr

02.06.11

surgeon: dr idris ahmed/kees waaldijk

assistant: kabir lawal

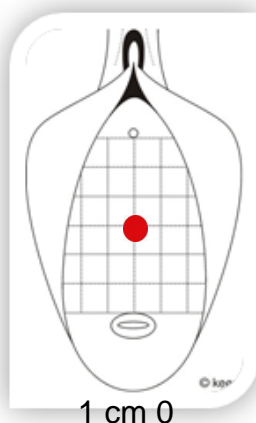
diagnosis: PII (all alive), \pm 1 cm 0 urethrovesicovaginal fistula type **IIAa** at midline, leaking urine for 11 mth which started immediately following obstructed last labor for 1 day, at home live male, married 10 yr ago pre(menarche 4 mth later), not living with husband, normal menstruation, no (h/o) drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no h/o eclampsia; nor mal ap diameter/pubis arch 85° , ar pos, cervix mobile euo/f 2.5 cm, f/c 2 .5cm, i/v 12 cm 158.0 cm

operation: uvvf-repair + bilateral pcf fixation

duration: 40 min (**personal supervision**) healing 85% continence 90%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

small episiotomy L, transverse incision thru/at fistula edge, sharp dissection, now 2 cm 0 bladder_urethra defect, tension-free transverse bladder/urethra closure by single layer of inverting serafit with bilateral fixation of pc fascia onto paraurethra atf by 1x serafit each side, **no** urine thru suture line/euo on rest/cough/pressure, ballooning of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 2.0 cm normal bladder capacity (longitudinal diameter 12-2 = 10 cm) acceptable position of uv-junction **against** middle/caudad third of symphysis normal-width 2 cm good-quality urethra_euo in anatomic position



RR
preanesthesia: 130/80 mm Hg
5': 120/70
10': 120/70
postoperation: 120/70

pt 014

katsina mdg
anteriobilateral trauma

rvf

vvf 8076
cath 1333

f s z (katsina)

female

37 yr

31.01.11

surgeon: dr nasir garba/kees waaldijk

assistant: kabir lawal

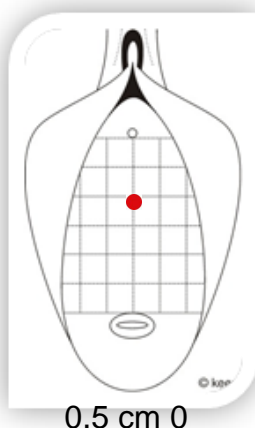
diagnosis: PXI (9 alive), \pm 0.5 cm 0 urethrovesicovaginal fistula midline type **IIAb** within healed 5x1 cm avw trauma/pcf defect with urethra block, leaking urine for 6 mth which started immediately following obstructed last labor for < 1day, in hospital sb female, married 24 yr ago post(menarche 1 mth earlier), still living with husband, no menstruation, drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/pubis arch 85°, ar slightly pos bilaterally, **no** saddle anesthesia, **no** stool/flatus incontinence, anus closed, cervix mobile, transverse 5x1 cm pcf defect, bilateral atf/atl + pc_ilcm trauma
euo/f 2 cm, ab/au 1 cm, f/c 3 cm, i/v 12 cm 156.0 cm

operation: 1/2 circumferential uvvf-repair + bilateral pcf refixation

duration: 30 min (**personal supervision**) healing 95% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision thru/at fistula thru avw trauma, sharp dissection, tension-free 1/2 circumferential uvvf-repair by end-to-end vesicourethrostomy by single layer of inverting serafit, transverse repair/bilateral fixation of pc fascia onto paraurethra_euo atf/symphysis by 2x serafit each side, **no** urine thru suture line/euo on rest/cough/pres sure, ballooning of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 11 cm, good anterior elevation, euo/b 2.8 cm normal bladder capacity (longitudinal diameter 11-2.8 = 8 cm)
good position of uv-junction **fixed against** middle third of symphysis
normal-width 3 cm good-quality urethra_euo in anatomic position



RR
preanesthesia: 130/80 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

pt 015

katsina mdg
total circumferential trauma

vvf 005
rvf

b i y (katsina)

female

30 yr

02.06.11

surgeon: dr idris a halliru

assistant: gambo lawal

diagnosis: PIX (4 alive), \pm 4 cm 0 urethrovesicovaginal fistula with circumferential defect type **IIBb**, "**healing**" \pm 0.5 cm proximal rectovaginal fistula **la** midline fixed to cervix, **leaking urine/passing flatus pv and incontinence for 50 days** which started immediately following obstructed last labor for 1 days, in hospital sb female, married 16 yr ago post(menarche 1 yr earlier), living with husband, no menstruation, drop foot R (grade 4-5) and L (grade 4-5), no yankan gishiri, no h/o eclampsia; normal ap diameter/pubis arch 85°, ar **neg** with **saddle anesthesia**, anus closed, **flatus incontinence**, bilateral atf/atl + pc_ilc_iscm loss, cervix mobile
euo/f 0.5 cm, f/c 3 cm, ab/au 2 cm, i/v 11 cm 149.0 cm

operation: circumferential uvvf-repair + bilateral pcf refixation as **first stage**

duration: 45 min healing 90% continence 20%

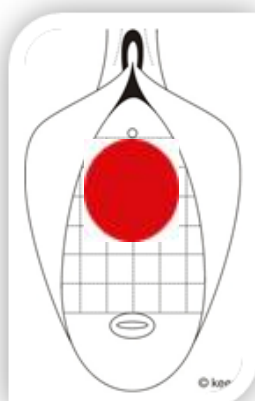
anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

incision at fistula edge, sharp circumferential dissection, advancement/caudad fixation of anterior bladder onto symphysis/urethra, tension-free circumferential uvvf-repair by end-to-end vesicourethrostomy by single layer of inverting serafit, bilateral fixation of pc fascia onto paraurethra_euo atf/symphysis by 2x serafit each side, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 0.5 cm

normal bladder capacity (longitudinal diameter 12-0.5 = 11.5 cm

poor position of uv-junction **fixed against** caudad third of symphysis

normal-width 0.5 cm poor-quality urethra_euo in anatomic position



4 cm 0

RR
preanesthesia: 130/90 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

pt 016

katsina
total circumferential trauma

VVF 8077/7945
cath 1303 rvf

r u m (katsina)

female

17 yr

03.06.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PI (0 alive), total post **IIAb** intrinsic_stress incontinence grade III, leaking urine whilst lying/sitting/standing/walking + no spontaneous miction after early circumferential repair 22.10.10, not living with husband, normal menstruation, drop foot R (grade 5 against 4) and L (grade 4 against 2-3), no rvf, no yankan gishiri, no h/o eclampsia; normal AP diameter/pubis arch 85°, AR pos, no longer stool_flatus incontinence, bilateral atf/atl + pc_iloc_ iscm loss R > L, **healed** proximal pvw/cervix trauma
open urethra_euo posteriorly pulled inside euo/c 4 cm
euo/bw 14 cm, good elevation, euo/b 0.2 cm, i/v 9 cm 149.0 cm

operation: urethralization by bilateral pcf refixation

duration: 20 min (**step-by-step teaching**) healing 95% continence 85%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

gv/ **no** leakage urine level in accord with respiration

re-episiotomy L, transverse incision thru op scar, sharp dissection, bilateral fixation of pc fascia onto intact paraurethra_euo atf/symphysis by 2x serafit each side with normalization of distal urethra_euo, euo/b 1.4 cm, **no** urine thru euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 14 cm, good anterior elevation, euo/b 1.4 cm (**urethralization**)

normal bladder capacity (longitudinal diameter 14-1.4 = 12.5 cm)

poor position of uv-junction **fixed against** caudad third of symphysis

normal-width 1.5 cm medium-quality urethra_euo in anatomic position

it will normalize under physiologic stress

RR

preanesthesia: 120/80 mm Hg

5': 120/70

10': 120/70

postoperation: 120/70

pt 018

katsina
anterior trauma

vvf 8078

a n k (katsina)

female

14 yr

03.06.11

surgeon: dr sunday eneme adaji/kees waaldijk

assistant: kabir lawal

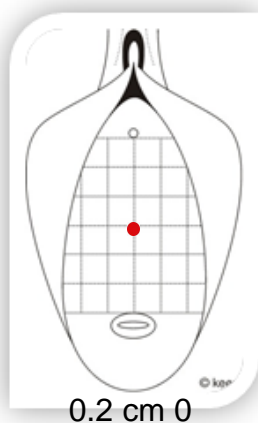
diagnosis: PI (alive), retracted ± 0.2 cm 0 urethrovesicovaginal fistula type **IIAa** at tip of healed 2.5 cm proximal ^ avw trauma, leaking urine for 4 mth which started immediately following obstructed labor for 5 days, in hospital live male, married 1 yr ago pre(menarche 1 mth later), not living at husband, no menstruation, drop foot R (grade 4) and L (grade 4), no rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/pubic arch 85°, ar pos, cervix mobile
euo/f 2.5 cm, f/c 2.5 cm, i/v 12 cm 152.0 cm

operation: uvvf-repair

duration: 40 min (**personal supervision**) healing 95% continence 90%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

small episiotomy L, “large” transverse incision thru/at fistula edge, sharp dissection, tension-free transverse bladder/urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 13 cm, good anterior elevation, euo/b 2.3 cm
normal bladder capacity (longitudinal diameter 13-2.3 = 10.5 cm)
good position of uv-junction **against** middle third of symphysis
normal-width 2.5 cm good-quality urethra_euo in anatomic position



	RR
preanesthesia:	130/90 mm Hg
5':	130/80
10':	120/70
postoperation:	120/70

pt 019

katsina
total circumferential trauma

vvf 8079
cath 1340

r a b (jigawa)

female

15 yr

03.06.11

surgeon: kees waaldijk

assistant: kabir lawal

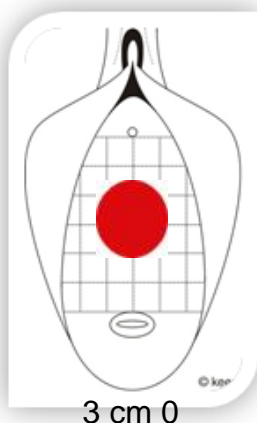
diagnosis: PI (0 alive), \pm 3 cm 0 urethrovesicovaginal fistula type **IIAb** at midline with almost circumferential defect (0.3 cm anteriorly intact)/bladder base prolapse, leaking urine of 4 mth that started immediately following obstructed labor of 2 days, in hospital (1 day) sb female, married 3 yr ago pre (menarche 1 yr later), not living at husband, no menstruation, drop foot R (grade 4) and L (grade 4), **healed** 1 cm 0 proximal midline pvw/cervix trauma (**never** tusa pv), no rvf, no yankan gishiri, eclampsia no; normal ap diameter/wide pubic arch 90°, ar pos, minimal bilateral atf/ atl + pc_ilcm trauma, transverse 5x2 cm pcf defect, cervix mobile ref euo/f 2 cm, f/c 2 cm, i/v 12 cm 148.0 cm

operation: bilateral ureters, 4/5 circumferential uvvf-repair + bilateral pcf refixation

duration: 30 min (**step-by-step teaching**) healing 95% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

small episiotomy L, bilateral ureter catheterization for 20 cm, transverse incision thru/at fistula edge, sharp 4/5 circumferential dissection, tension-free 4/5 circumferential uvvf-repair by end-to-end vesicourethrostomy by single layer of inverting serafit, bilateral fixation of pc fascia onto paraurethra_euo atf/symphysis by 2x serafit each side, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw/avw_cervix adaptation by 2x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 1.7 cm normal bladder capacity (longitudinal diameter 12-1.7 = 10.5 cm) poor position of uv-junction **fixed against** caudad third of symphysis normal-width 1.5 cm good-quality urethra_euo in anatomic position



RR
 preanesthesia: 120/70 mm Hg
 5': 120/70
 10': 120/70
 postoperation: 120/79

pt 020

katsina mdg
anterior trauma

vvf 006

s u m (rép niger)

female

33 yr

03.06.11

surgeon: dr said ahmad

assistant: gambo lawal

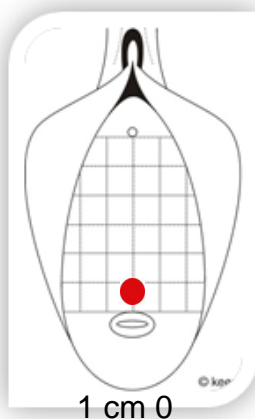
diagnosis: PVI (4 alive), \pm 1 cm 0 vesicovaginal fistula type I at midline, leaking urine for 6 yr which started immediately following obstructed 4th labor for 2 days, in hospital sb male, married 20 yr ago pre(menarche 3 mth later), still living with husband, normal menstruation, drop foot R (grade 4-5) and L (grade 4-5), no rvf, yankan no gishiri, no h/o eclampsia; normal ap diameter/pubis arch 85°, ar pos, cervix mobile
euo/f 5 cm, f/c 0.5 cm, i/v 11 cm 155.0 cm

operation: uvvf-repair

duration: 45 min healing 85% continence 90%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision thru/at fistula edge, sharp dissection, tension-free longitudinal bladder closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 11 cm, good anterior elevation, euo/b 2.5 cm
normal bladder capacity (longitudinal diameter 11-2.5 = 8.5 cm)
good position of uv-junction **against** middle third of symphysis
normal-width 2.5 cm urethra_euo in anatomic position



RR
preanesthesia: 130/80 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

pt 021

katsina mdg

vvf 007

total circumferential trauma + iatrogenic

rvf 001

b i m (katsina)

female

25 yr

03.06.11

surgeon: dr said ahmad

assistant: gambo lawal

diagnosis: PVI (3 alive), **multiple two** \pm 3 cm 0 urethrovesicovaginal fistula type **IIAb** with circumferential defect and \pm 1 cm 0 cs-vcvf, \pm 1 cm proximal rectovaginal fistula type **Ib** midline with rectum stricture, leaking urine/pas sing stools pv for 6 mth which started immediately following cs bco obstructed last labor for 2 days, sb male, married 13 yr ago pre(menarche 1 yr later), not living with husband, no menstruation, drop foot R (grade 2-3) and L (grade 4), no yankan gishiri, eclampsia yes; normal ap diameter/pubic arch 85°, ar pos, "cervix" not identified but fixed/retracted midline euo/f 3 cm, f/f 2 cm, f/c 0 cm, a/f 10 cm, f/"c" 1 cm, i/v 11 cm 151.0 cm

operation: cs-vcvf-repair **first stage** + rvf-repair

duration: 75 min

healing **both** 75%

continence

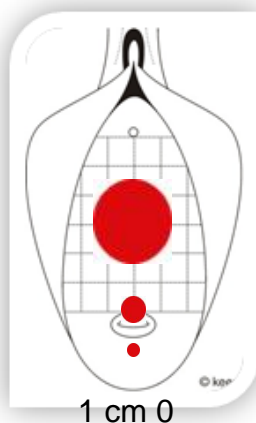
anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision thru/at fistula edge, sharp dissection, tension-free transverse bladder closure by single layer of inverting serafit, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon; euo/bw 12 cm

bladder capacity (longitudinal diameter 12-

disruption of rectum stricture, incision at rvf edge, sharp dissection, tension-free transverse rectum closure by single layer of inverting serafit, transverse pvw adaptation by 2x everting seralon, check on hemostasis

for circum uvvf-repair as **second stage**



RR
preanesthesia: 130/80 mm Hg
5': 120/70
10': 120/70
postoperation: 120/70

pt 022

katsina mdg

vvf 007

total circumferential trauma + iatrogenic

rvf 001

b i m (katsina)

female

25 yr

03.06.11

surgeon: dr said ahmad

assistant: gambo lawal

diagnosis: PVI (3 alive), **multiple two** \pm 3 cm 0 urethrovesicovaginal fistula type **IIAb** with circumferential defect and \pm 1 cm 0 cs-vcvf, \pm 1 cm proximal rectovaginal fistula type **Ib** midline with rectum stricture, leaking urine/pas sing stools pv for 6 mth which started immediately following cs bco obstructed last labor for 2 days, sb male, married 13 yr ago pre(menarche 1 yr later), not living with husband, no menstruation, drop foot R (grade 2-3) and L (grade 4), no yankan gishiri, eclampsia yes; normal ap diameter/pubic arch 85°, ar pos, "cervix" not identified but fixed/retracted midline euo/f 3 cm, f/f 2 cm, f/c 0 cm, a/f 10 cm, f/"c" 1 cm, i/v 11 cm 151.0 cm

operation: cs-vcvf-repair **first stage** + rvf-repair

duration: 75 min healing **both** 75% continence **s** 95%

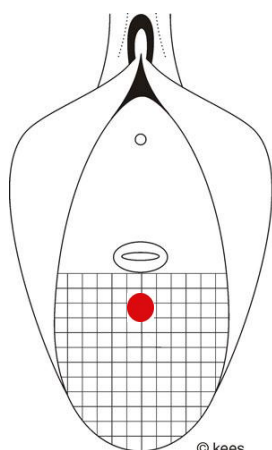
anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision thru/at fistula edge, sharp dissection, tension-free transverse bladder closure by single layer of inverting serafit, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon; euo/bw 12 cm

bladder capacity (longitudinal diameter 12-

blunt disruption of rectum stricture, incision at rvf edge, sharp dissection, tension-free transverse rectum closure by single layer of inverting serafit, transverse pvw adaptation by 2x everting seralon, check on hemostasis

for circum uvvf-repair as **second stage**



1 cm 0

RR
 preanesthesia: 130/80 mm Hg
 5': 120/70
 10': 120/70
 postoperation: 120/70

pt 023
pt

katsina mdg
second obstetric fistula
anterior trauma

vvf 008
vvf 3755

a m b (kano)

female

31 yr

03.06.11

surgeon: dr said ahmad/dr abdulmajid

assistant: gambo lawal

diagnosis: PV (0 alive), \pm 0.5 cm 0 vesicocervicovaginal fistula midline I, leaking urine for 19 mth which started immediately following obstructed last labor for < 1 day, live female who died months later, married 18 yr ago pre(men arche 1 mth later), still living at husband, normal menstruation, no (h/o) drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/pubis arch 85°, ar pos, anterior cervix loss/retracted operated 1x (kano) + successful cs-vcvf-repair delivery I euo/f 6 cm, f" c" 0 cm, i/v 12 cm cystocele ++ 145.0 cm

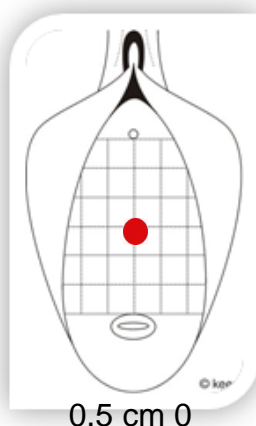
operation: vcvf-repair

duration: 50 min

healing 85% continence 90%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision thru/at fistula edge, sharp dissection, tension-free bladder closure by 2x inverting serafit purse string, **no** urine thru suture line/euo on rest/cough/pressure, fixation foley ch 18, transverse avw/cervix adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 12 cm, poor anterior elevation, euo/b 1.5 cm normal bladder capacity (longitudinal diameter 12-1.5 = 10.5 cm) poor position of uv-junction **against** caudad third of symphysis normal-width 1.5 cm good-quality urethra_euo in anatomic position



RR
preanesthesia: 130/80 mm Hg
5': 120/80
10': 120/70
postoperation: 120/70

pt 024

katsina mdg
anteriolateral R trauma

vvf 009

n u d (rép niger)

female

33 yr

03.06.11

surgeon: dr idris a halliru

assistant: gambo lawal

diagnosis: PVIII (6 alive), **mutilated** \pm 2 cm 0 urethrovesicovaginal fistula type **IIAa** at R, leaking urine for 2 yr which started immediately following cs bco obstructed last labor for 7 days, in hospital (2 days) sb male, married 20 yr ago post(menarche 3 mth earlier), still living with husband, normal menstruation, drop foot R (grade 4) and L (grade 4), no rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/pubis arch 85°, ar pos, cervix fixed towards i spine R, operated 2x (zinder)
euo/f 3 cm, f/c 2 cm, i/v 12 cm 144.5 cm

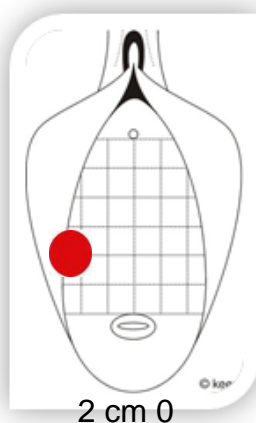
operation: complicated uvvf-repair

duration: 25 min

healing 90% continence 75%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

incision at fistula edge, sharp dissection, tension-free transverse bladder/urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, fixation foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 2 cm normal bladder capacity (longitudinal diameter 12-2 = 10 cm)
acceptable position of uv-junction **against** middle/caudad third of symphysis
normal-width 2 cm good-quality urethra_euo in anatomic position



RR
preanesthesia: 130/90 mm Hg
5': 130/80
10': 130/80
postoperation: 120/80

**cut-thru + iatrogenic trauma; superficially it looks normal
sphincter ends at 10 & 14 hr with anorectum mucosa prolapse**

I a k (niger state)

female

19 yr

04.06.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PII (all alive), **mutilated** sphincter ani rupture with 1 cm longitudinal ano rectum trauma type **IIb**, stool/flatus incontinence for 7 mth which started immediately following obstructed last labor of 7 days, at home live female, married 6 yr ago pre(menarche 2 mth later), still living with husband, normal menstruation, no (h/o) drop foot R (grade 5) and L (grade 5), no vvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/**wide** pubic arch 95°, ar pos, operated 3x (2x zurmi + 1x b/r_acquire)
a/f 0 cm, i/v 12 cm never leaking urine 146.0 cm

operation: anorectum closure and sphincter ani_perineal body reconstruction

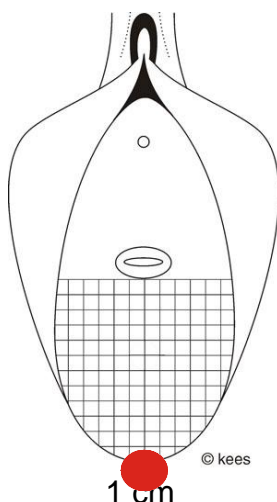
duration: 30 min (**step-by-step teaching**) healing 85% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

longitudinal incision/median episiotomy thru **mutilated** perineum (introitus stenosis) up to anorectum edge, scar tissue ++, minimal dissection with freshening of sphincter ani ends, longitudinal anorectum closure with adaptation_rhaphy of internal sphincter over 1 cm up to anocutaneous junction (with repositioning of anterior anus) by 1x inverting serafit, inner ring of external sphincter adapted, end-to-end external sphincter ani reconstruction by 3x serafit, perineal body repair with (in)direct re-union of transversus perinei muscles and (in)direct posterior re-union of bulbocavernosus muscles by 3x serafit, perineum well adapted with anus in anatomic position, check on hemostasis

it looks normal now: **no longer anorectum mucosa prolapse**

foley ch 18; free urine flow, euo/bw 13 cm, good elevation, euo/b 2 cm



RR
preanesthesia: 130/80 mm Hg
5': 120/70
10': 120/70
postoperation: 120/70

pt 026
pt

katsina
total circumferential defect
third now stone-induced fistula

vvf 8080
vvf 2599

m s b (bauchi)

female

54 yr

04.06.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PXI (6 alive), very extensive \pm 0.1 cm 0 urethrovesicovaginal fistula type **IIAb** at R, 3x1x1 cm smooth-surface bladder stone, urine for 1 yr which started after period of cough/fever/lower abdominal pain, married 41 yr ago post(menarche 1 mth earlier), still living with husband, menopause 8 yr ago, drop foot R (grade 5) and L (grade 5), no rvf; after repair she developed another obstetric fistula which was repaired successfully (b/r_ja) euo/f 1.5 2 cm, f/c 1 cm mutilated euo 149.5 cm

operation: transurethral stone removal as **first stage**

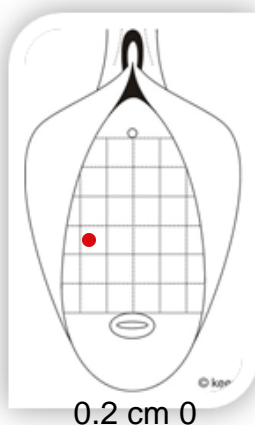
duration: 10 min

healing

continence

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

easy gentle dilatation thru H12, transurethral removal of 3x1x1 cm bladder stone in one piece though it was crushed in the end, transurethral flushing out debris from bladder, foley ch 18, vagina pack compressing urethra against symphysis bco oozing; free clear urine flow, euo/bw 14 cm, good anterior elevation, euo/b 1.5 cm normal bladder capacity (longitudinal diameter 14-1.5 = 12.5 cm) poor position of uv-junction **fixed against** caudad third of symphysis for continent urethra reconstruction as **second stage** next week



RR
preanesthesia: 200/120 mm Hg
5': 180/100
10': 170/100
postoperation: 160/90

pt 027
pt

katsina
kano

vvf 8081/8025
vvf 4576

extensive circumferential + mutilating iatrogenic trauma

a ar k (niger state) female 20 yr 04.06.11

surgeon: kees waaldijk

assistant: kabir lawal

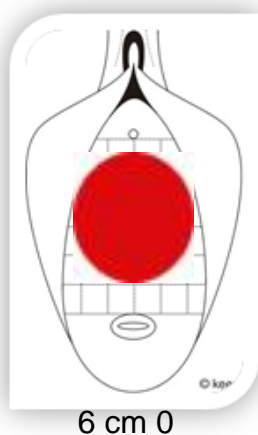
diagnosis: PI, **severely mutilated extensive** ± 6 cm 0 urethrovesicovaginal fistula type **IIBb** with circumferential defect, leaking urine for 6 yr which started immediately following obstructed labor for 2 days, at home sb male, married 8 yr ago pre(menarche 1 yr later), not living with husband, no menstruation, bilateral drop foot for 2 mth R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/pubic arch 85°, ar pos, **major** bilateral atf/atl + pc_io_ilc_iscm loss + ssl_pm trauma + lpl stricture, "operated" 2x (kontagora), 2° cervix prolapse obesity ++ **mutilated** euo/f 1 cm, f/c 2 cm, ab/au 4 cm, i/v 10 cm 150 cm

operation: **ps-like** uvvf-"repair" **last resort final**

duration: 50 min healing 60% continence 10%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

3 cm 0 bladder opening fixed to cephalad symphysis with 2° cervix prolapse
episiotomy L with stricture severing, incision at fistula edge, **sharp** dissection, **ps-like** uvvf-repair by 10x everting seral on, triple fixation of foley ch 18 with transverse avw adaptation, check on hemostasis, episiotomy closure; free urine flow, euo/bw 12 cm, good elevation, euo/b 1.1 cm on flushing with water **no** leaking
normal bladder capacity (longitudinal diameter 12-1.1 = 11 cm, large circ defect)
poor position "uv-junction" **against** caudad third of symphysis
normal-width 1 cm **mutilated** urethra_euo in anatomic position looks now "normal"
it went fine though **highly complicated** without any complication



RR
preanesthesia: 130/80 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

pt 028

katsina mdg
total circular trauma

vvf 010

r m d (katsina)

female

16 yr

04.06.11

surgeon: dr idris a halliru

assistant: gambo lawal

diagnosis: PI, ± 4 cm 0 urethrovesicovaginal fistula type **IIAa** midlineR, leaking urine for 6 mth which started immediately following obstructed labor for 2 days, in hospital sb male, married 2 yr ago post(menarche 6 mth earlier), not living with husband, normal menstruation, drop foot R (grade 2) with contracture of 90/0° dorsiflexion and L (grade 3-4), no rvf, no yankan gishiri, eclampsia yes; normal ap diameter/pubis arch 85°, ar pos, cervix fixed midline, severe vagina stenosis/moderate shortening
euo/f 2.5 cm, f/c 0 cm, i/v 7 cm 150.0 cm

operation: catheterization R ureter + uvvf-repair

duration: 50 min healing 85% continence 85%

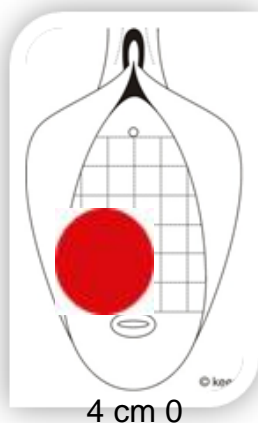
anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

bilateral episiotomy with severing of stenosis, only R ureter identified/catheterized for 20 cm, incision at fistula edge, sharp dissection, tension-free transverse bladder/urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw approximation by 2x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 2.5 cm

normal bladder capacity (longitudinal diameter 12-2.5 = 9.5 cm)

good position of uv-junction **against** middle third of symphysis

normal-width 2.5 cm good-quality urethra_euo in anatomic position



	RR
preanesthesia:	120/70 mm Hg
5':	120/70
10':	120/70
postoperation:	120/70

pt 029

katsina mdg
anterior trauma

vvf 011

r a d (rép niger)

female

22 yr

04.06.11

surgeon: dr idris a halliru

assistant: gambo lawal

diagnosis: PIII (0 alive), **mutilated** ± 1 cm 0 urethrovesicovaginal fistula type **IIAa** at mid.line, leaking urine for 3 yr which started immediately following last obstructed labor for 3 days, at home sb female, married 10 yr ago pre (menarche 1 yr later), not living with husband, normal menstruation, bilateral drop foot for 2 mth R (grade 5) and L (grade 5), no rvf, no yankan gishi ri, eclampsia no; normal ap diameter/narrow pubic arch 75°, ar pos, cervix "mobile", 5x 1 cm transverse pcf defect, operated 2x (damagaram)
euo/f 3 cm, f/c 3 cm, i/v 11 cm 148.0 cm

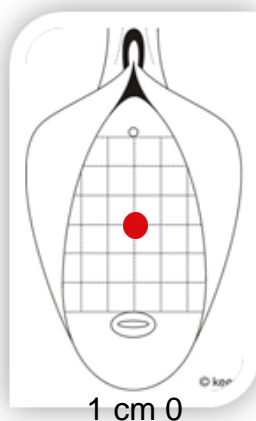
operation: uvvf-repair + transverse pcf repair

duration: 40 min

healing 85% continence 90%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision thru fistula/previous repair scar, sharp dissection, tension-free transverse bladder/urethra closure with transverse pc fascia repair by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 13 cm, good anterior elevation, euo/b 2.7 cm
normal bladder capacity (longitudinal diameter 13-2.7 = 10.5 cm)
good position of uv-junction **against** middle third of symphysis
normal-width 2.5 cm good-quality urethra_euo in anatomic position



	RR
preanesthesia:	130/90 mm Hg
5':	120/80
10':	120/80
postoperation:	120/70

pt 030

katsina mdg
anterior trauma

vvf 012

u h j r (rép niger)

female

20 yr

04.06.11

surgeon: dr said ahmad

assistant: kabir lawal

diagnosis: PIII (0 alive), \pm 1.5 cm 0 vesicovaginal fistula type I at R, leaking urine for 1 yr which started immediately following obstructed last labor for 1 day, in hospital sb female, married 8 yr ago pre(menarche 1 yr later), not living with husband, normal menstruation, drop foot R for 1 mth (grade 5) and L (grade 5), no rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter /pubic arch 85°, ar pos, cervix mobile, operated 1x (b/r_id)
euo/f 5 cm, f/c 1 cm, i/v 11 cm 153.0 cm

operation: vvf-repair

duration: 60 min

healing 85% continence 95%

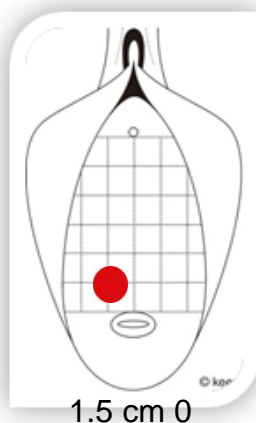
anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

episiotomy R, incision at fistula edge, sharp dissection, tension-free oblique bladder closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, oblique avw adaptation by 3x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 2.1 cm

normal bladder capacity (longitudinal diameter 12-2.1 = 10 cm)

acceptable position of uv-junction **against** middle/caudad third of symphysis

normal-width 2 cm good-quality urethra_euo in anatomic position



	RR
preanesthesia:	120/70 mm Hg
5':	110/70
10':	110/70
postoperation:	100/60

pt 031

katsina mdg
anterior trauma

vvf 013

m m t/k (katsina)

female

29 yr

04.06.11

surgeon: dr said ahmad

assistant: gambo lawal

diagnosis: PVII (4 alive), \pm 1.5 cm 0 urethrovesicovaginal fistula type I midline, **leaking urine for 49 days** which started immediately following obstructed last labor for 1 day, in hospital sb female, married 15 yr ago post(menarche 8 mth earlier), still living with husband, no menstruation, drop foot R (grade 4) and L (grade 4), no rvf, no yankan gishiri, eclampsia delivery I; normal ap diameter/narrow pubic arch 70°, ar pos, cervix fixed midline
euo/f 5 cm, f/c 1 cm, i/v 10 cm 149.0 cm

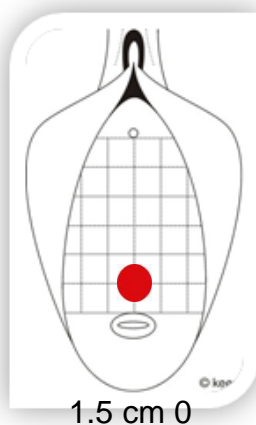
operation: vvf-repair

duration: 90 min

healing 90% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

incision at fistula edge, sharp dissection, tension-free transverse bladder closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 11 cm, good anterior elevation, euo/b 2.5 cm normal bladder capacity (longitudinal diameter 11-2.5 = 8.5 cm) good position of uv-junction **against** middle third of symphysis normal-width 2.5 cm good-quality urethra_euo in anatomic position



	RR
preanesthesia:	130/90 mm Hg
5':	130/80
10':	130/80
postoperation:	130/80

cut-thru trauma with borderline pubic arch 80°

h a s d (katsina)

female

43 yr

05.06.11

surgeon: kees waaldijk

assistant: kabir lawal

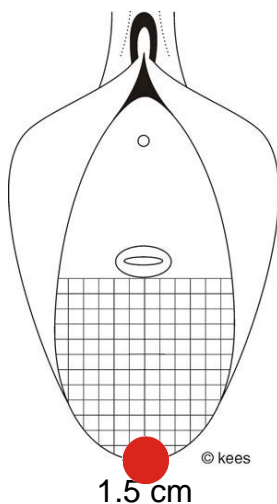
diagnosis: PX (all alive), sphincter ani rupture with \pm 1.5 cm longitudinal anorectum trauma **IIb**, stool/flatus incontinence for 10 yr which started immediately following 7th labor for 1 day, at home live female, married 30 yr ago post(menarche 4 mth earlier), still living with husband, normal menstruation, no h/o drop foot R (grade 5) and L (grade 5), no vvf, no yankan gish iri, no h/o eclampsia; normal ap diameter/borderline pubic arch 80°, ar pos, operated 2x (daura), defective perineum
a/f 0 cm, i/v 12 cm never leaking urine 152.0 cm

operation: anorectum closure and sphincter ani_perineal body reconstruction

duration: 25 min (**step-by-step teaching**) healing 90% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

small longitudinal "episiotomy" with incision at pwv edge with freshening of sphincter ani ends, minimal sharp dissection, longitudinal anorectum closure with adaptation_rhaphy of internal sphincter over 2 cm up to anocutaneous junction (with repositioning of anterl or anus) by double layer of inverting interrupted/continuous serafit, inner ring of external sphincter adapted, end-to-end external sphincter ani reconstruction by 2x serafit, perineal body repair with (in)direct re-union of transversus perinei muscles and (in)direct posterior re-union of bulbocavernosus muscles by 2x serafit, perineum well adapted with anus in anatomic position, check on hemostasis
foley ch 18; free urine flow, euo/bw 12 cm, moderate elevation, euo/b 1.5 cm



	RR
preanesthesia:	120/80 mm Hg
5':	120/80
10':	120/80
postoperation:	120/80

anterior trauma; second obstetric fistula

h h k (katsina)

female

31 yr

05.06.11

surgeon: dr sadiya nasir/kees waaldijk

assistant: kabir lawal

diagnosis: PVIII (5 alive), minute < 0.1 cm 0 vesicovaginal fistula type I slightly at R, leaking urine for 10 mth which started immediately following obstructed last labor for < 1 day, at home live male, married 18 yr ago pre(menarche 5 mth later), not living at husband, normal menstruation, no h/o drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/pubis arch 85°, ar pos, cervix mobile
euo/f 5 cm, f/c 1.5 cm, i/v 12 cm 148.5 cm

operation: vvf-repair

duration: 40 min (**personal supervision**) healing 95% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

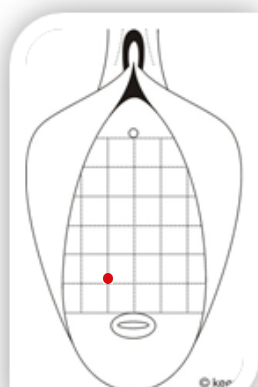
fistula demonstrated by gv

small episiotomy R, "large" incision at fistula edge, sharp dissection, excision of scar tissue +, now 0.3 cm 0 bladder defect, tension-free transverse bladder/urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 12 cm, poor anterior elevation and euo/b 2.1 cm

normal bladder capacity (longitudinal diameter 12-2.1 = 10 cm)

good position of uv-junction **against** middle third of symphysis

normal-width 2 cm medium-quality urethra_euo in anatomic position



minute < 0.1 cm 0

RR
preanesthesia: mm Hg
5':
10':
postoperation:

pt 034

katsina
total circumferential trauma

vvf 8083/7751
rvf

f n d (katsina)

female

16 yr

05.06.11

surgeon: kees waaldijk

assistant: kabir lawal

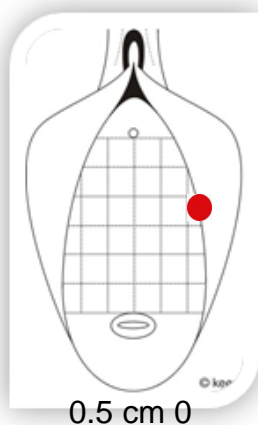
diagnosis: PI (0 alive), residual \pm 0.5 cm 0 urethrovesicovaginal fistula type L lungu following circ repair 3.2.10, not living with husband, no menstruation since drop foot R (grade 3) and L (grade 4), healed 0.5 cm 0 proximal midline pvw_cervix trauma (tusa pv for 1 mth), no rvf; normal ap diameter/pubis arch 85°, ar pos, bilateral atf/atl + pc_ilc_iscm loss + ssl_pm trauma, moderate stenosis/shortening, cervix fixed midline
euo/f 1.5 cm, f/c 2 cm, i/v 7 cm 148.0 cm

operation: uvvf-repair + pcf repair/bilateral fixation

duration: 40 min healing 85% continence 85%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

re-episiotomy, large transverse incision thru fistula/previous op scar, sharp dissection, **very poor tissue quality** with 5x1.5 cm transverse pcf defect, tension-free transverse bladder/urethra closure by single layer of inverting serafit with transverse repair/bilateral fixation of pc fascia, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 1.7 cm normal bladder capacity (longitudinal diameter 12-1.7 = 10.5 cm)
poor position of uv-junction **against** caudad third of symphysis
normal-width 1.5 cm medium-quality urethra_euo in anatomic position
the **problem**: **very poor tissue quality** at least pcf repaired



RR

preanesthesia: 130/70 mm Hg
 5': 120/70
 10': 120/70
 postoperation: 120/70

z h b (rép niger) female 18 yr 05.06.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PI (0 alive), total urine intrinsic-stress incontinence grade III, leaking urine whilst lying/sitting/standing/walking & **no** spontaneous miction following cir repair 13.11.08 and incontinence "surgery" 21.4.10 (b/r_aw), still living with husband, normal menstruation, drop foot R (grade 5) and L (grade 4); normal AP diameter/wide pubic arch 90°, AR pos, bilateral atf/atf (para urethra intact) + pc_iloc_ iscm loss, ssl_pm trauma at R, cervix fixed towards R ischiac spine, proximal lpl stricture
open urethra_euo pulled posteriorly inside
euo/bw 14 cm, good elevation, euo/b 1.4 cm, i/v 14 cm 150.0 cm

operation: urethralization by bilateral pcf fixation

duration: 30 min (**step-by-step teaching**) healing 95% continence 90%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

gv/ **no** leakage but urine level in accord with respiration
re-episiotomy L with severing of stricture, transverse incision at 2 cm from euo thru repair scar, bilateral fixation of thin proximal pc fascia onto paraurethra_euo atf/symphysis by 2x serafit each side (with normalization of euo), euo/b 2.2 cm, **no** urine thru euo on rest/cough/pressure, triple fixation of FOLEY Ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis, episiotomy closure; free urine flow and euo/bw 14 cm, good anterior elevation, euo/b 2.2 cm
normal bladder capacity (longitudinal diameter 14-2.2 = 12 cm)
good position of UV-junction **fixed against** middle third of symphysis
normal-width 2.2 cm good-quality urethra_euo in anatomic position

RR
preanesthesia: 130/80 mm Hg
5': 120/70
10': 120/70
postoperation: 120/70

pt 036

katsina mdg
iatrogenic trauma

vvf 014

m i k (katsina)

female

31 yr

05.06.11

surgeon: dr idris a halliru

assistant: gambo lawal

diagnosis: PVIII (4 alive), \pm 1 cm 0 sth-cs-vesicocervicovaginal fistula type I midline, leaking urine for 3 mth which started immediately following sth-cs (with pat consent) bco obstructed last labor for 1 day, sb male, married 20 yr ago pre(menarche 2 mth later), still living with husband, no menstruation, no h/o drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/pubis arch 85°, ar pos, cervix remnant retracted midline high up, obesity ++++
euo/f 10 cm, f/c 0 cm, i/v 16 cm 154.0 cm

operation: assessment

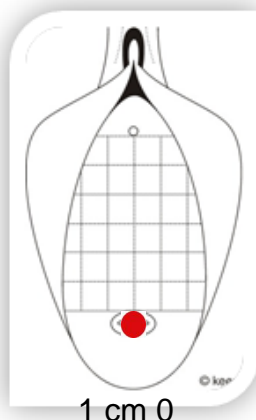
duration: 10 min

healing

continence

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

since everything fixed/retracted high up, poor operating table and severe obesity pat has to slim down first tca 6-8 mth for **proximal colpocleisis**



	RR
preanesthesia:	130/90 mm Hg
5':	130/80
10':	130/80
postoperation:	130/80

pt 037

katsina mdg
anterior trauma

vvf 015

b s k (katsina)

female

18 yr

05.06.11

surgeon: dr idris a halliru

assistant: gambo lawal

diagnosis: PI (0 alive), post **IIAa** total urine intrinsic_stress incontinence grade III, leaking whilst lying/sitting/standing/walking + no spontaneous miction following successful uvvf-repair 3.1.11 (b/r-id), leaking for 2 yr which started immediately following obstructed labor for 3 days, at home sb male, married 4 yr ago post(menarche 1 yr earlier), not living with husband, normal menstruation, drop foot R (grade 3) and L (grade 4), no rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/pubis arch 8i5°, ar pos, cervix mobile
euo/bw 12 cm, good elevation, euo/b 1.5 cm, i/v 11 cm 156.0 cm

operation: bilateral pcf fixation

duration: 30 min healing 95% continence 85%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision at 1.5 cm from euo thru repair scar, sharp dissection, bilateral fixation of pc fascia onto paraurethra_euo atf by 2x serafit each side, euo/b 2.5 cm, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 2.5 cm
normal bladder capacity (longitudinal diameter 12-2.5 = 9.5 cm)
good position of uv-junction **against** middle third of symphysis
normal-width 2.5 cm good-quality urethra_euo in anatomic position

RR
preanesthesia: 120/80 mm Hg
5': 120/70
10': 120/70
postoperation: 120/70

pt 038

katsina mdg
anterior trauma

vvf 016

a i m (katsina)

female

27 yr

05.06.11

surgeon: dr idris a halliru

assistant: gambo lawal

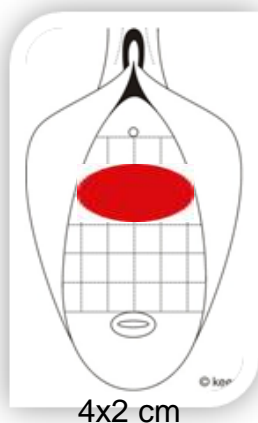
diagnosis: PVI (2 alive), \pm 4x2 cm transverse urethrovesicovaginal fistula type **IIAa** midline, leaking urine for 8 mth which started immediately following cs bco obstructed last labor for 2 days, sb female, married 13 yr ago post (menarche 1 yr earlier), not living with husband, normal menstruation, drop foot R (grade 4-5) and L (grade 4-5), no rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/pubic arch 85°, ar pos, cervix fixed midline transverse 5x2 cm pcf defect
euo/f 1.5 cm, f/c 4 cm, i/v 12 cm 160.0 cm

operation: uvvf-repair + bilateral pcf fixation

duration: 45 min healing 85° continence 85%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision thru/at fistula edge, sharp dissection, tension-free transverse bladder/urethra closure by single layer of inverting serafit with bilateral fixation of pc fascia onto paraurethra_euo atf by 2x serafit each side, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 2.0 cm
normal bladder capacity (longitudinal diameter 12-2.0 = 10 cm)
acceptable position of uv-junction **against** middle/caudad third of symphysis
normal-width 2 cm good-quality urethra_euo in anatomic position



	RR
preanesthesia:	130/80 mm Hg
5':	130/80
10':	130/80
postoperation:	130/80

z a i (kaduna)

female

32 yr

05.06.11

surgeon: dr idris halliru

assistant: gambo lawal

diagnosis: PVII (0 alive), \pm 2 cm 0 urethrovesicovaginal fistula type **IIAa**, leaking urine for 17 yr which started immediately following obstructed first labor for 3 days, at home sb female, married 20 yr ago pre(menarche 1 yr later) still living with husband, normal menstruation, bilateral drop foot for 1 mth R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/pubis arch 85°, ar pos, cervix fixed midline, operated 1x (ikara), transverse 4x2 cm fascia defect
euo/f 1.5 cm, f/c 3 cm, i/v 12 cm 150.0 cm

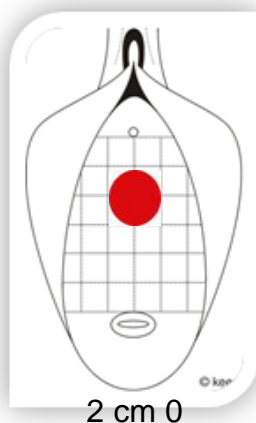
operation: uvvf-repair + transverse fascia repair

duration: 40 min

healing 90% continence 85%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision thru/at fistula edge, sharp dissection, tension-free transverse bladder/urethra closure with transverse pc fascia repair by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, ballooning of foley ch 18, transverse avw adaptation by 3x everting seralon, check on hemostasis; free urine flow, euo/bw 11 cm, good anterior elevation, euo/b 1.4 cm
normal bladder capacity (longitudinal diameter 11-1.4 = 9.5 cm)
poor position of uv-junction **against** caudad third of symphysis
normal-width 1.5 cm medium-quality urethra_euo in anatomic position



RR
preanesthesia: 130/80 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

pt 040

katsina mdg

vvf 8085

**fixation sutures thru superior pubic bone periost
looks like euo tampered with (besides caustics)**

a u w (katsina)

female

47 yr

06.06.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PIX (8 alive), cystocele_3° cervix prolapse_rectocele without genuine stress incontinence, something coming out of vagina for 10 mth which started spontaneously, married 35 yr ago pre(menarche 1 yr later), still living at husband, normal menstruation, no vvf/rvf, no yankan gishiri; normal ap diameter/**wide** pubic arch 95°, ar pos, decubitus ulcer anterior large cervix, rather short pvw, **caustics** applied
euo/c 8 cm **never** leaking urine "erosive" urethra_euo in anat pos
objective stress incontinence **±** after reduction only
euo/bw 18 cm, poor elevation, euo/b 0.4 cm 164.0 cm

operation: cervix suspension at L

duration: 15 min (**step-by-step teaching**) healing 95% continence 85%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

small avw incision avw ruga fold with transverse extension up to cervix, sharp dissection to create wound area/surface, paravesical space free, fixation of cervix (with adherent pc fascia) onto L superior pubic bone/pc_iloc_iom/atf/atl by 2x seralon, euo/b 1.1 cm, **no** urine thru euo on rest/cough/pressure but **±** after reduction at R, foley ch 18, check on hemostasis; free clear urine flow, euo/bw 18 cm, good elastic anterior elevation at L, rotational descent at R, euo/b 1.1 cm (**re-urethralization**) good cervix fixation **increased** bladder capacity (longitudinal diameter 18-1.1 = 17 cm)
poor position of uv-junction **against** caudad third of symphysis
"normal-width" 1 cm good-quality urethra_euo in anatomic position
since pat: **never** leaking urine nothing further done just wait & see

RR

preanesthesia: 180/110 mm Hg

5': 180/100

10': 170/100

postoperation: 150/90

pt 041

katsina mdg
total circumferential trauma

vvf 8086

s s k m (katsina)

female

31 yr

06.06.11

surgeon: dr sunday eneme adaji/kees waaldijk

assistant: kabir lawal

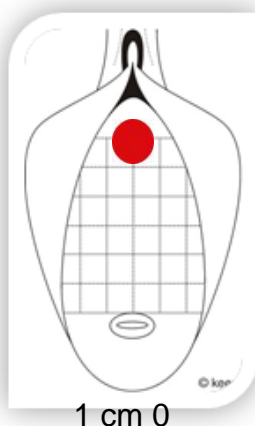
diagnosis: PVI (4 alive), \pm 1 cm 0 urethrovesicovaginal fistula type **IIAb** with circumferential defect within 5x2 cm transverse avw trauma/pcf defect, leaking urine for 4 mth which started immediately following obstructed last labor for 3 days, in hospital sb male, married 18 yr ago post(menarche 2 mth earlier), still living with husband, normal menstruation, drop foot R (grade 4) and L (grade 4), no rvf, no yankan gishiri, no eclampsia; normal ap diameter/borderline pubic arch 80°, ar pos, bilateral atf/atl + pc_ilc_iscm loss, cervix mobile, cystocele +, lpl stricture
euo/f 1 cm, f/c 4 cm, ab/au 0.5 cm, i/v 10 cm 148.0 cm

operation: uvvf-repair + bilateral pcf refixation

duration: 45 min (**personal supervision**) healing 95% continence 85%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

episiotomy L with severing of stricture, transverse incision thru fistula/avw trauma, sharp dissection, tension-free transverse uvvf-repair by single layer of inverting serafit, with transverse pcf repair/bilateral fixation onto paraurethra_euo atf/symphysis by 2x serafit each side, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 2.0 cm normal bladder capacity (longitudinal diameter 12-2.0 = 10 cm) acceptable position of uv-junction **fixed against** middle/caudad third of symphysis normal-width 1 cm medium-quality urethra_euo in anatomic position



RR
preanesthesia: 120/80 mm Hg
5': 120/70
10': 120/70
postoperation: 120/70

pt 042

katsina

vvf 8087

total circumferential trauma

z i b k (katsina)

female

16 yr

06.06.11

surgeon: dr idris ahmed/kees waaldijk

assistant: kabir lawal

diagnosis: PI, \pm 1 cm 0 urethrovesicovaginal fistula type **IIAa** with **b** characteristics midline within 5x2 cm pcf defect, **leaking urine for 39 days** which started immediately following obstructed labor for 2 days, in hospital sb male, married 3 yr ago pre(menarche 2 mth later), not living with husband, no menstruation, drop foot R (grade 4) and L (grade 4), \pm 2.5 cm longitudinal proximal pvw scar/posterior cervix (**never** tusa pv), no rvf, no yankan gish iri, no eclampsia; normal ap diameter/pubis arch 85°, ar pos, cervix fixed towards i spine R, bilateral trauma atf/atl + pc_ilcm + ssl trauma at R
 euo/f 2.5 cm, f/c 4 cm, i/v 12 cm 152.0 cm

operation: uvvf-repair + transverse pcf repair

duration: 45 min (**personal supervision**) healing 95% continence 85%

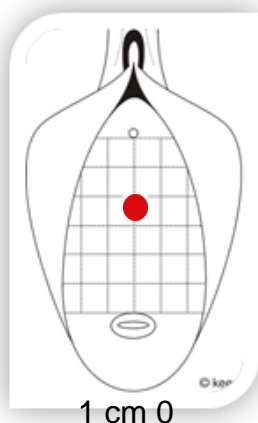
anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

small episiotomy L, transverse incision thru fistula/pcf defect, sharp dissection, inflammation +, tension-free transverse bladder/urethra closure by single layer of inverting serafit with transverse pc fascia repair, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 1.9 cm

normal bladder capacity (longitudinal diameter 12-1.9 = 10 cm)

acceptable position of uv-junction **against** middle/caudad third of symphysis

normal-width 2 cm good-quality urethra_euo in anatomic position



RR

preanesthesia: 140/80 mm Hg
 5': 130/80
 10': 120/70
 postoperation: 120/70

pt 043

katsina

vvf 8088/8008

**congenital; either cyst skene gland R or ectopic ureter
photographic documentation**

s m a c

female

13 yr

06.06.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: P0, now only leaking urine \pm whilst sitting (not at night and not whilst lying/standing/walking) + spontaneous miction for 13 yr since she was born, **never** married, menarche 3 mth ago, normal menstruation, drop foot R (grade 5) and L (grade 5), no vvf/rvf, no yankan gishiri; normal anteroposterior/pubis arch 85° , ar pos

objective stress incontinence ++

longitudinal 3x1.5 cm cystic swelling midline/R between avw/pc fascia with small distal opening

euo/bw 12 cm, good elevation, euo/b.1.1 cm, i/v 11 cm

euo/cys 1 cm, cys/c 2 cm

148.0 cm

operation: assessment by methylene blue iv and gv into bladder

duration: 30 min

healing

continence

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

small opening at 2 cm from euo on distal tip of cystic swelling from which clear fluid; on probing with small sound no incoming "ureter" found

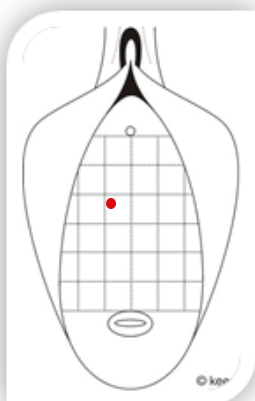
5 ml methylene blue iv now slightly colored fluid from that opening

150 ml gv into bladder for 5 min: no gv from that opening

since it is still not clear (but suspicious of ectopic ureter) the best we can do is:

first **iv urography**

luckily we have not done anything



RR
 preanesthesia: 120/70 mm Hg
 5': 120/70
 10': 120/70
 postoperation: 120/70

pt 044

katsina mdg

vvf 017 vvf 7982

**anterior + iatrogenic trauma + R posterior
one fistula that specific one after cs**

h a g (bauchi)

female

27 yr

06.06.11

surgeon: dr idris a halliru

assistant: gambo lawal

diagnosis: PVI (3 alive), urethra block and \pm 0.5 cm tah-cs-vcvf at L following uvvf-repair 23.1.11 as **first stage**, leaking urine for 3 mth which started immediately following tah-cs (pat informed) bco obstructed last labor for 1 day, SB male, married 15 yr ago pre(menarche 1 yr later), not living with husband, no menstruation, drop foot R (grade 5) and L (grade 4-5), no rvf, no yankan gishiri, no h/o eclampsia; normal AP diameter/pu bic arch 85°, AR pos, cervix-remnants fixed to i spine R, ssl_pm trauma R
euo/f 5 cm, f" c" 0 cm, i/v 12 cm 152.5 cm

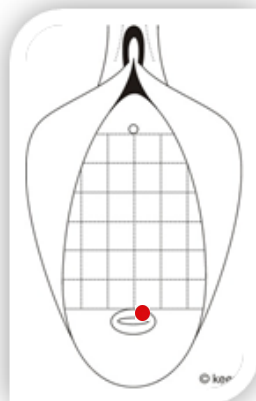
operation: tah-cs-vcvf-repair as **second stage**

duration: 30 min

healing 85% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

deblocking uv-junction and gradual dilatation thru H12, transverse incision thru fistula, sharp dissection, transverse bladder closure by single layer of inverting serafit, triple fixation of foley ch 18, transverse avw/pvw adaptation by 3x everting seralon, check on hemostasis; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 2.4 cm normal bladder capacity (longitudinal diameter 12-2.4 = 9.5 cm)
good position of uv-junction **against** middle third of symphysis
normal-width 2.5 cm medium-quality urethra_euo in anatomic position



0.5 cm 0

RR
preanesthesia: 170/120 mm Hg
5': 160/100
10': 150/90
postoperation: 150/80

pt 045

katsina mdg
anterior/iatrogenic trauma

vvf 018
cath 1345

s a d (katsina)

female

31 yr

06.06.11

surgeon: dr idris a halliru

assistant: gambo lawal

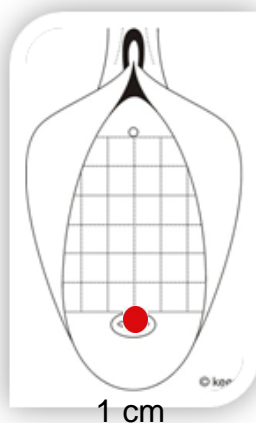
diagnosis: PX (2 alive), \pm 1 cm cs-vesicocervicovaginal fistula, leaking urine for 3 mth which started immediately following cs bco obstructed last labor for < 1 day, sb male, married 18 yr ago pre(menarche 7 days later), not living with husband, no menstruation, no drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no eclampsia; normal ap diameter/pubis arch 85°, ar pos, cervix fixed midline also **objective** stress incontinence ++
euo/f 8 cm, f/c 0 cm 164.0 cm

operation: catheterization L ureter + cs-vcvf-repair

duration: 45 min healing 95% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

only L ureter identified/catheterized for 20 cm, transverse incision thru fistula, sharp dissection, tension-free transverse bladder closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw/cervix adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 14 cm, good anterior elevation, euo/b 2.5 cm
normal bladder capacity (longitudinal diameter 14-2.5 = 11.5 cm)
good position of uv-junction **against** middle third of symphysis
normal-width 2.5 cm good-quality urethra_euo in anatomic position



	RR
preanesthesia:	140/90 mm Hg
5':	130/80
10':	120/70
postoperation:	120/70

anterior + iatrogenic trauma

a i k/r b (katsina)

female

20 yr

06.06.11

surgeon: dr idris a halliru

assistant: gambo lawal

diagnosis: PII (all alive), \pm 1.5 cm 0 tah-cs-vesicocervicovaginal fistula type I midline, **leaking urine for 43 days** which started immediately following tah-cs bco obstructed last labor for 2 days, live male, married 4 yr ago post(menarche 3 yr earlier), not living with husband, no menstruation, drop foot R (grade 4) and L (grade 3), no rvf, no yankan gishiri, eclampsia yes; normal ap diameter/pubis arch 85° , ar pos, "cervix" fixed euo/f 6 cm, f" c" 0 cm, i/v 12 cm 150.0 cm

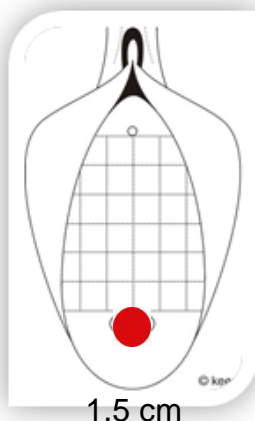
operation: tah-cs-vcvf-repair

duration: 40 min

healing 95% continence 90%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

bimanual examination: no uterus/cervix identified, transverse incision thru/at fistula edge, sharp dissection, tension-free transverse bladder closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw/pvw adaptation by 2x everting seralon, check on hemo stasis; free urine flow, euo/bw 16 cm, good anterior elevation, euo/b 3.0 cm normal bladder capacity (longitudinal diameter 16-3 = 13 cm) good position of uv-junction **against** middle third of symphysis normal-width 3 cm good-quality urethra_euo in anatomic position



RR
 preanesthesia: 120/70 mm Hg
 5': 120/70
 10': 120/70
 postoperation: 120/70

pt 047

katsina
post IIAa repair

vvf 020

w i d (katsina)

female

15 yr

06.06.11

surgeon: dr idris a halliru

assistant: gambo lawal

diagnosis: PI (0 alive), post **IIAa** total urine intrinsic_stress incontinence grade III, leaking urine whilst lying/sitting/standing/walking/no spontaneous miction for 8 mth which started immediately following cs bco obstructed labor for 1 day, sb female, married 2 yr ago post(menarche 2 mth earlier), not with husband, normal menstruation, bilateral foot drop for 1 mth R (grade 5) and L (grade 5), no rvf no yankan gishiri, eclampsia yes; normal ap diame ter/pubic arch 85°, ar pos, cervix fixed midline, operated 1x (funtua) euo/c 4 cm **open** urethra_euo posteriorly drawn inside euo/bw 14 cm, good elevation, euo/b 1.0 cm 146.5 cm

operation: paraurethra_euo fixation of pc fascia

duration: 25 min

healing 95% continence 85%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

100 ml gv: **no** leakage urine level in accord with respiration
transverse incision at 1.5 cm from euo thru repair scar, sharp dissection, scar tissue ++, bilateral fixation of poor-quality scarred proximal pc fascia onto para-euo symphysis by 2x serafit each side with urethra_euo repositioning/stabilization and fascia tightening, now euo/b 2.7 cm, **no** urine thru euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon; free urine flow, euo/bw 14 cm, good elastic anterior elevation, euo/b 2.7 cm (**urethralization_compression**)
normal bladder capacity (longitudinal diameter 14-2.7 = 11.5 cm)
good position of uv-junction **against** third of symphysis
good fascia plate good-quality pcm
normal-width 2.5 cm medium-quality urethra_euo in anatomic position
the **problem: scar tissue ++**

RR

preanesthesia: 130/80 mm Hg

5': 120/80

10': 120/70

postoperation: 120/70

pt 048

katsina mdg

vvf 8089

**fixation sutures thru superior pubic bone periost
posterior trauma; span to broad; narrow euo documented**

h a y i (katsina)

female

36 yr

07.06.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PVI (3 alive), cystocele_total 3° cervix prolapse_rectocele without genuine stress incontinence, something coming out of vagina for 3 yr that started spontaneously following last labor of 1 day, at home live male, married 25 yr ago pre(menarche 2 yr later), still with husband, normal menstruation, drop foot R (grade 5) and L (grade 5), no vvf/rvf, no yankan gishiri, no eclampsia; normal ap diameter/**wide** pubic arch 95°, ar pos, no decubitus ulcer cervix **no** objective stress incontinence (also not after reduction) euo/c 8 cm **never** leaking urine **narrow** urethra_euo in anat pos euo/bw 18 cm, poor elevation, euo/b 1.5 cm 158.0 cm

operation: cervix suspension at L

duration: 15 min (**step-by-step teaching**) healing 95% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

small avw incision avw ruga fold with transverse extension up to cervix, sharp dissection to create wound area/surface, paravesical space free, fixation of cervix (with adherent pc fascia) onto L superior pubic bone/pc_iloc_ion/atf/atl by 2x seralon, euo/b 2.7 cm, **no** urine thru euo on rest/cough/pressure, foley ch 18, check on hemostasis; free clear urine flow, euo/bw cm, good elastic anterior elevation at L, slight rotational descent at R, euo/b 2.7 cm (**re-urethralization**) good cervix fixation **increased** bladder capacity (longitudinal diameter 18-2.7 = 15.5 cm) good position of uv-junction **against** middle third of symphysis normal-width 2.5 cm good-quality urethra_euo in anatomic position

RR

preanesthesia: 180/110 mm Hg

5': 170/100

10': 160/100

postoperation: 150/90

pt 049

katsina

vvf 8090/7967

anteriolateroposterior trauma at L

cath 1305

d s g b (katsina)

female

35 yr

07.06.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PVIII (4 alive), residual \pm 0.2 cm vesicovaginal fistula midline after **complicated early** closure 15.11.10, still living at husband, normal menstruation, drop foot R (grade 2-3 with gm_at contracture up to 90° dor siflexion) and L (grade 3-4 with gm_at contracture up to 95° dorsiflexion); normal AP diameter/wide pubic arch 95°, AR pos, iscm_ssl_pm trauma at L, cervix fixed towards i spine L
euo/f 5 cm, f/c 0 cm, i/v 12 cm 156.0 cm

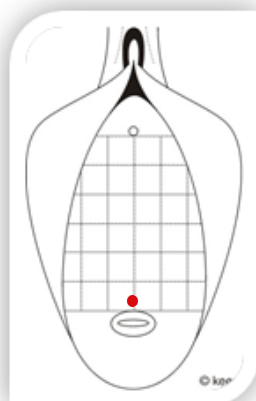
operation: vvf-repair

duration: 25 min

healing 95% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

small episiotomy L, transverse incision thru fistula, sharp dissection, excision of scar tissue +, tension-free transverse bladder closure by single layer of inverting serafit, **no** urine thru euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw/cervix adaptation by 2x everting seralon, check on hemostasis, episiotomy closure; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 2.8 cm
normal bladder capacity (longitudinal diameter 12-2.8 = 9 cm)
good position of uv-junction **against** middle third of symphysis
normal-width 3 cm good-quality urethra_euo in anatomic position



0.2 cm 0

RR
preanesthesia: 130/80 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

pt 050

katsina
iatrogenic

vvf 8091

s y r (katsina)

female

28 yr

07.06.11

surgeon: kees waaldijk

assistant: binta adamu/kabir lawal

diagnosis: PVIII (0 alive), \pm 0.2 cm 0 tah-cs-vesicocervicovaginal fistula type I mid line within posterior cervix remnants (2 cm 0 bladder defect), leaking urine for 3 mth which started immediately following tah-cs (pat informed) bco obstructed last labor for < 1 day, sb male, married 15 yr ago pre(menar che 2 mth later), still living with husband, no menstruation, no drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no eclampsia; normal ap diameter/pubic arch 85°, ar pos, post cervix remnants fixed midline euo/f 6 cm, f" c" 0 cm, i/v 11 cm 143.0 cm

operation: tah-cs-vcvf-repair

duration: 40 min

healing 95% continence 95%

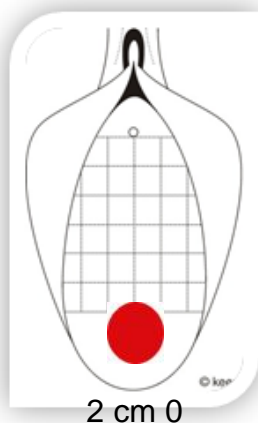
anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

small episiotomy L, transverse incision thru fistula, at sharp dissection 2 cm 0 bladder defect, tension-free transverse bladder/posterior cervix closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw/post cervix remnant adaptation by 2x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 13 cm, moderate anterior elevation, euo/b 1.4 cm

normal bladder capacity (longitudinal diameter 13-1.4 = 11.5 cm)

poor position of uv-junction **against** caudad third of symphysis

normal-width 1.5 cm good-quality urethra_euo in anatomic position



	RR
preanesthesia:	150/90 mm Hg
5':	140/90
10':	130/80
postoperation:	130/80

pt 051

katsina

vvf 8092

extensive total circumferential trauma + iatrogenic mutilation

h u b (katsina)

female

17 yr

07.06.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PI (0 alive), **mutilated very extensive** ± 6 cm 0 urethrovesicovaginal fistula with circumferential defect type **II Bb**, leaking urine for 1.4 yr which started immediately following obstructed labor for 2 days, in hospital sb male, married 3 yr ago post(menarche 6 mth earlier), not living with husband, no menstruation, drop foot R (grade 2-3) and L (grade 2-3) both with contracture up to 90/0° dorsiflexion, no rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/wide pubic arch 95°, ar pos, bilateral **major** atf/atl + pc_io_ilc_iscm loss, cervix mobile, "operated" 24.4.10 (acquire_), lpl stricture only distal 1.5 cm anterior urethra left euo/f 0 cm, f/c 0 cm, ab/au 2 cm, i/v 8 cm 146.5 cm

operation: ureters + circumferential bladder/avw fixation as **first stage mini surgery**

duration: 45 min (**state-of-the-art**) healing 95% continence 5%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

episiotomy L with severing of severe stricture, bilateral ureter catheterization for 20 cm, incision at fistula edge, sharp circumferential dissection, advancement/caudad fixation of anterior bladder onto symphysis/urethra, tension-free circumferential bladder fixation into "euo" by single layer of inverting serafit, ballooning of foley ch 18, transverse avw_symphysis/avw_cervix adaptation by 4x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 0.5 cm normal bladder capacity (longitudinal diameter 12-0.5 = 11.5 cm) poor position of uv-junction **fixed against** caudad third of symphysis normal-width 0.5 cm poor-quality urethra_euo in anatomic position it went fine



extensive 6 cm 0

RR
preanesthesia: 120/70 mm Hg
5': 120/70
10': 120/70
postoperation: 120/70

pt 052

katsina mdg
anterior trauma

vvf 021

m a s (katsina)

female

42 yr

07.06.11

surgeon: dr idris a halliru

assistant: gambo lawal

diagnosis: PXIII (8 alive), \pm 1x0.2 cm longitudinal urethrovesicovaginal fistula type **IIAa** midline, leaking urine for 5 mth which started immediately following cs bco obstructed labor for 1 day, live female, married 30 yr ago pre(men arche 1 yr later), still living with husband, normal menstruation, drop foot R (grade 4) and L (grade 5), no rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/pubic arch 85°, ar pos, cervix fixed midline
euo/f 3 cm, f/c 2 cm, i/v 12 cm 151.0 cm

operation: uvvf-repair

duration: 30 min

healing 95% continence 85%

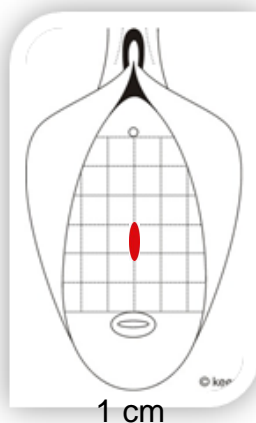
anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

longitudinal incision thru/at fistula edge, sharp dissection, tension-free longitudinal bladder_urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, longitudinal avw adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 2.7 cm

normal bladder capacity (longitudinal diameter 12-2.7 = 9.5 cm)

good position of uv-junction **against** middle third of symphysis

normal-width 2.5 cm good-quality urethra_euo in anatomic position



	RR
preanesthesia:	120/80 mm Hg
5':	120/70
10':	120/70
postoperation:	120/70

pt 053

katsina mdg

vvf 022

anterior + iatrogenic trauma

h m m (katsina)

female

31 yr

07.06.11

surgeon: dr idris a halliru

assistant: gambo lawal

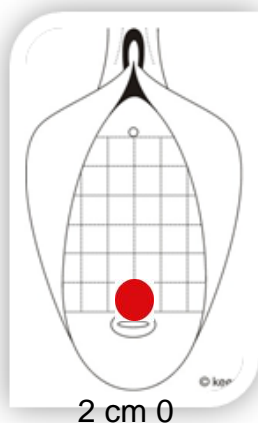
diagnosis: PX (6 alive), \pm 2 cm 0 cs-vesicocervicovaginal fistula type I, leaking urine for 3 mth which started immediately following cs bco obstructed labor for < 1 day, sb female, married 28 yr ago pre(menarche 2 mth later), no living with husband, no menstruation, no drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no eclampsia; normal ap diameter/pubis arch 85°, ar pos, cervix fixed midline
 euo/f 6 cm, f/c 0 cm, i/v 12 cm 160.0 cm

operation: bilateral ureter catheterization and cs-vcvf-repair

duration: 50 min healing 95% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

bilateral jureter catheterization for 20 cm, incision at fistula edge, sharp dissection, tension-free transverse bladder closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw/cervix adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 11 cm, good anterior elevation, euo/b 2.1 cm
 normal bladder capacity (longitudinal diameter 11-2.1 = 9 cm)
 good position of uv-junction **against** middle third of symphysis
 normal-width 2 cm good-quality urethra_euo in anatomic position



RR

preanesthesia: 130/80 mm Hg
 5': 130/80
 10': 130/80
 postoperation: 130/80

pt 054

katsina mdg

vvf 023

vvf 7875/7770

anterior + iatrogenic trauma

h s k (jigawa)

female

24 yr

07.06.11

surgeon: dr said ahmad

assistant: gambo lawal

diagnosis: PIV (3 alive), residual 0.5 cm cs-vcvf following successful uvvf-“repair” 13.2.10 to 19.6.10, not living with husband, normal menstruation, no (h/o) drop foot R (grade 5) and L (grade 5); normal AP diameter/pubis arch 85°, AR pos uvvf **healed**
euo/f 6 cm, f”c” 0, i/v 12 cm, “cervix” fixed 148.0 cm

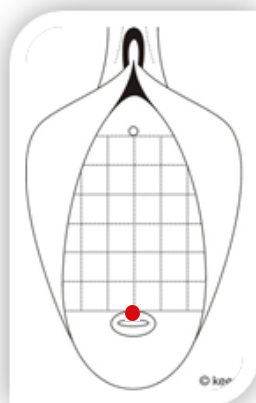
operation: cs-vcvf-repair as **second stage**

duration: 60 min

healing 90% continence 85%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision thru fistula, sharp dissection, tension-free longitudinal bladder closure by single layer of inverting serafit, urine + thru euo on cough, triple fixation of foley ch 18, longitudinal avw adap tation by 2x everting seralon, check on hemostasis, skin closure; free urine flow, EUO/BW 13 cm, anterior elevation, EUO/B 2 cm normal bladder capacity (longitudinal diameter 13-2 = 11 cm) acceptable position of UV-junction **against** middle/caudad third of symphysis normal-width 2 cm medium-quality urethra_euo in anatomic position



RR
 preanesthesia: 130/80 mm Hg
 5': 120/70
 10': 120/70
 postoperation: 120/70

pt 055
pt

katsina mdg
second obstetric cs fistula

vvf 024

vvf 7960
vvf 7335

r a d (katsina)

female

21 yr

07.06.11

surgeon: dr said ahmad

assistant: gambo lawal

diagnosis: PII (1 alive), residual \pm 1 cm 0 cs-vesicocervicovaginal fistula at midline following **early ps-like** cs-uvcvf-rpair 6.11.10, not living at husband, normal menstruation, drop foot R (grade 4-5) and L (grade 5); normal ap diameter /pubic arch 85°, ar pos, cervix fixed/retracted midline but moving little on cough
euo/f 5 cm, f/c 0 cm, i/v 12 cm

referral

148.0 cm

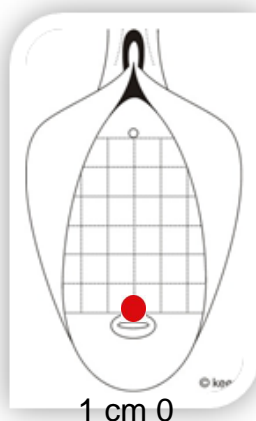
operation: cs-uvcvf-repair

duration: 50 min

healing 90% continence 85%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

bilateral episiotomy L, incision at fistula edge, minimal sharp dissection, tension-free longitudinal bladder single layer of inverting serafit closure by 4x everting seralon, urine \pm thru euo on cough, triple fixation of foley ch 18, check on hemostasis, skin closure; free urine flow, euo/bw 13 cm, good anterior elevation, euo/b 2.4 cm normal bladder capacity (longitudinal diameter 12-2.4 = 9.5 cm) good position of UV-junction **against** middle third of symphysis normal-width 2.5 cm good-quality urethra_euo in anatomic position



RR
preanesthesia: 130/70 mm Hg
5': 120/70
10': 120/70
postoperation: 110/70

**anterior trauma; second obstetric fistula
demonstration to the trainees**

I s d (katsina)

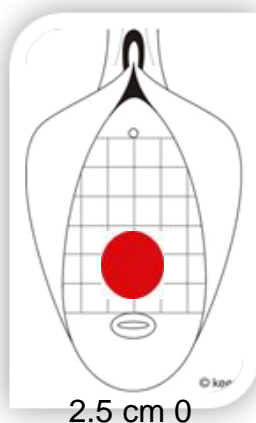
female

40 yr

08.06.11

diagnosis: PX (3 alive), ± 2.5 cm 0 **necrotic** urethrovesicovaginal fistula type **IIAa** at midline, **leaking urine for 5 days** which started immediately following obstructed last labor for 2 days, in hospital sb female, married 28 yr ago pre(menarche 1 yr later), still living with husband, no menstruation, drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no eclampsia; normal ap diameter/pubis arch 85° , ar pos, successful repair (b/r_awal) delivery IX obesity ++
euo/f 4 cm, f/c 0 cm 148.5 cm

08.06.11 foley ch 18; free urine flow, euo/bw 11 cm, moderate anterior elevation, euo/b 2 cm
normal bladder capacity (longitudinal diameter $11-2 = 9$ cm)
acceptable position uv-junction **against** middle/caudad third symphysis
normal-width 2 cm good-quality urethra_euo in anatomic position
will it heal since **deep necrosis**



too complicated for one stage; final continence 85%
very nicely healed; documented

s u r g (zamfara) female 16 yr 08.06.11

surgeon: kees waaldijk

assistant: kabir lawal

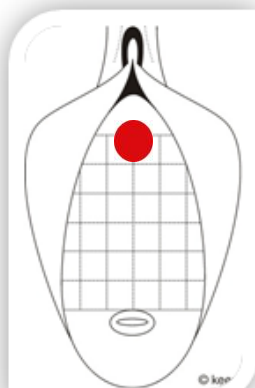
diagnosis: P0, residual \pm 1 cm **wide open** euo_urethrovesicovaginal fistula type **IIBa** after **nicely healed** continent bladder/fascia/avw fixation as **first stage** 19.9.10, not living with husband, normal menstruation (even now; normal ap diameter/ pubic arch 85°, ar pos, operated 1x (mawch_) euo/f 0 cm, f/c now 4 cm, i/v 10 cm obesity ++ 161.0 cm

operation: continent urethra/fascia/avw reconstruction as **second stage**

duration: 40 min (**step-by-step teaching**) healing 90% continence 85%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

re-episiotomy L, wide H incision around fistula-euo, sharp dissection, sharp mobilization of (para)urethra tissue, tension-free longitudinal urethra reconstruction over 1.5 cm by single layer of inverting serafit, bilateral fixation of pc fascia onto para_euo symphysis/atf by 1x serafit each side, euo/b 2.2 cm, **no** urine thru euo on rest/cough/pressure, triple fixation of foley ch 18, avw reconstruction by avw advancement flap by 4-point fixation onto paraurethra atf/symphysis by everting seralon, check on hemostasis, episiotomy closure; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 2.2 cm normal bladder capacity (longitudinal diameter 12-2.2 = 10 cm) good position uv-junction **against** middle third symphysis normal-width 2 cm good-quality urethra_euo in anatomic position also cosmetically nice result



wide open euo

RR
 preanesthesia: 130/80 mm Hg
 5': 130/80
 10': 130/80
 postoperation: 130/80

pt 058
pt

katsina
second obstetric fistula: anterior trauma

vvf 8094
vvf 7675
cath 1330

d n b (katsina) female 21 yr 08.06.11

surgeon: dr nasir garba/kees waaldijk

assistant: kabir lawal

diagnosis: PIV (0 alive), minute < 0.1 cm 0 urethrovesicovaginal fistula type **IIAa** midline, leaking urine for 6.5 mth which started immediately following last obstructed labor for 1 day, in hospital sb male, married 9 yr ago pre(men arche 1 yr later), still living with husband, no menstruation, no drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/pubis arch 85°, ar pos, successful repair delivery II **wide open** euo + **objective stress ++** due to **inflammation/scar tissue** euo/f 3 cm, f/c 2 cm, i/v 11 cm cervix mobile 152.0 cm

operation: excision of scar tissue + uvvf-repair

duration: 40 min (**personal supervision**) healing 95% continence 85%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

fistula confirmed by gv

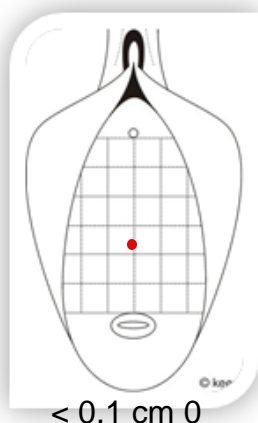
small re-episiotomy L, transverse incision thru fistula edge, sharp dissection, excision of inflammation/scar tissue + with normalization of euo, tension-free transverse bladder/urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon, check hemostasis, skin closure; free urine flow, euo/bw 13 cm, good anterior elevation, euo/b 1.7 cm **inflammation/scar tissue**

normal bladder capacity (longitudinal diameter 13-1.7 = 11.5 cm)

poor position of uv-junction **against** caudad third of symphysis

normal-width 1.5 cm medium-quality urethra_euo in anatomic position

once fistula healed inflammation/scar tissue will soften up



RR
preanesthesia: 140/80 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

pt 059
pt
pt

katsina mdg
third obstetric leakage
cervix fixed midline

vvf 8095
vvf 4762
vvf 6208/6278

m i i (rép niger) female 28 yr 08.06.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PII (0 alive), total post **IIAb** intrinsic-stress incontinence grade III, leaking urine whilst lying/sitting/standing/walking for 7 mth which started following lower abdominal pain/fever ??miscarriage??, at home sb male, married 15 yr ago post(menarche 3 mth earlier), still living with husband, normal menstruation, drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no h/ eclampsia; normal AP diameter/narrow pubic arch 70°, ar pos, anterior cervix loss; success repair after delivery I + II, bilateral atf/atf + pc_ ilcm loss, 4x1 cm transverse pcf defect **completely ok until then open** urethra_euo post pulled inside, moderate stenosis/shortening euo/bw 13 cm, good elevation, euo/b 1.1 cm, i/v 7 cm 150.0 cm

operation: transverse pcf repair/bilateral refixation **last resort**

duration: 45 min (**step by-step teaching**) healing 95% continence 85%

anesthesia: spinal L4/L5 with 4 ml bupivacaine 0.5%

gv/ **no** leakage but urine level in accord with respiration
re-episiotomy L, transverse incision over pcf defect at 2 cm from euo, sharp dissection, transverse pcf repair/bilateral fixation onto paraurethra_euo atf by 2x serafit each side with normalization of euo, euo/b 2.0 cm, **no** urine thru eu on rest/cough/pressure, triple fixation of FOLEY Ch 18, transverse avw-symphysis/cervix adaptation by 2x everting seralon, check on hemostasis, skin closure, pack; free urine flow, euo/bw 13 cm, good anterior elevation, euo/b 2.0 cm (**loss**)
normal bladder capacity (longitudinal diameter 13-2 = 11 cm)
acceptable position of UV-junction **against** middle/caudad third of symphysis
normal-width 2 cm good-quality urethra_euo in anatomic position

RR
preanesthesia: 130/80 mm Hg
5': 120/70
10': 120/70
postoperation: 120/70

pt 060
pt

katsina mdg

rvf 1024
vvf 7508

extensive obstetric trauma along whole pelvis inlet ring

s m d (katsina)

female

21 yr

08.06.11

surgeon: kees waaldijk

assistant: kabir lawal

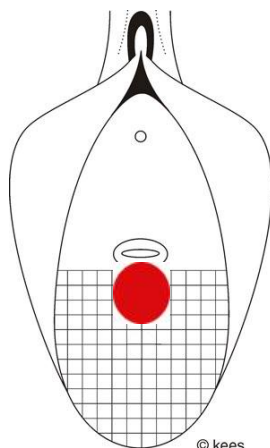
diagnosis: PII (0 alive), \pm 4 cm proximal rectovaginal fistula **lc** with circumferential defect/rectum stricture fixed to sacrum/cervix, passing stools pv for 3 yr which started immediately following ?sth?-cs bco obstructed last labor for 1 day, sb male, married 8 yr ago pre(menarche 3 mth later), not living with husband, **no** menstruation since, drop foot R (grade 2-3) and L (grade 3) both with contracture up to 90°/0° dorsiflexion, no yankan gishiri, eclampsia yes; normal AP diameter/**wide** pubic arch 90°, AR pos, extensive bilateral atf/atl + pc_iloc_iscm muscle loss + ssl_pm trauma, cervix fixed midline, iom intact uvvf **healed** now pat wants rvf to be repaired a/f 8 cm, pr/pr 3 cm, f/C 0 cm, i/v 12 cm 150.0 cm

operation: **ps-like** rvf-repair as **second stage**

duration: 40 min ("**minimum surgery**") healing 75% continence 90%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

RE/ \pm 2.5 cm 0 scarred rectum stricture (good passage so **no** disruption)
re-episiotomy L, incision around fistula edge thru posterior cervix, **no** dissection, transverse **ps-like** posterior cervix/pvw adaptation by 5x everting seral on, check on hemostasis, episiotomy closure fasigyn/chloramphenicol/iv fluids



4 cm 0

RR
preanesthesia: 130/80 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

total urge urine incontinence due to bladder stone
septic surgery principle: avw closure + drainage into bladder

r a b r (katsina) female 41 yr 08.06.11

surgeon: dr idris a halliru

assistant: gambo lawal

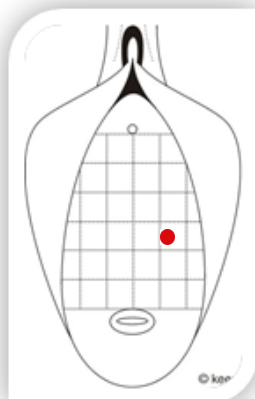
diagnosis: PIX (4 alive), \pm 0.5 cm 0 urethrovesicovaginal fistula L type **IIAa** following vaginal cystostomy + stone removal 27.1.11, not living with husband, menopause for 1 yr; normal ap diameter/narrow pubic arch 60°, ar pos euo/f 2 cm, f/c 3 cm, i/v 11 cm cervix at vault 167.0 cm

operation: uvvf-repair + pcf fixation

duration: 10 min healing 90% continence 75%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse thru/at fistula edge, sharp dissection, tension-free transverse bladder/urethra closure by single layer of inverting serafit with bilateral fixation of pc fascia onto para urethra atf, **no** urine thru repair line/euo, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 8 cm, good anterior elevation, euo/b 2.5 cm
 moderate bladder capacity (longitudinal diameter 8-2.5 = 5.5 cm)
 good position of uv-junction **against** middle third of symphysis
 "normal-width 2.5 cm poor-quality urethra_euo in anatomic position"



0.5 cm 0

RR
 preanesthesia: 150/100 mm Hg
 5': 150/90
 10': 150/80
 postoperation: 150/80

anterior + severe iatrogenic trauma

h u a (bauchi)

female

22 yr

08.06.11

surgeon: dr idris a halliru

assistant: gambo lawal

diagnosis: PIII (1 alive), **mutilated extensive** \pm 2.5 cm 0 urethrovesicovaginal fistula type **IIAa**, leaking urine for 4 yr which started immediately following last obstructed labor for 2 days, in hospital sb male, married 9 yr ago pre (menarche 3 mth later), not living at husband, normal menstruation, drop foot R (grade 4) and L (grade 4), no rvf, no yankan gishiri, no eclampsia; ?ap diameter?/narrow pubic arch 50°, ar pos, cervix fixed midline, "operated" 2x (potiskum)

euo/f 2 cm, f/c 0 cm, i/v 5 cm

147.0 cm

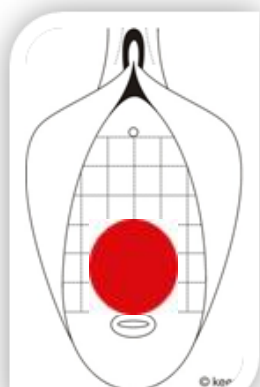
operation: **complicated** uvvf-repair

duration: 55 min

healing 75% continence 60%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

episiotomy, incision at fistula edge, sharp dissection, tension-free transverse bladder/urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw approximation by 2x everting seralon but there remains gap, check on hemostasis, skin closure; free urine flow, euo/bw 9 cm, good anterior elevation, euo/b 1 cm
normal bladder capacity (longitudinal diameter 9-1 = 8 cm)
poor position of uv-junction **against** caudad third of symphysis
normal-width 1 cm poor-quality urethra_euo in anatomic position



mutilated 2.5 cm 0

RR
preanesthesia: 130/80 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

pt 063
pt

katsina mdg
second obstetric fistula, anterior trauma

vvf 027
vvf 6364
cath 869

r y c (katsina) female 35 yr 08.06.11

surgeon: dr said ahmad

assistant: gambo lawal

diagnosis: PXI (2 alive), \pm 0.5 cm 0 urethrovesicovaginal fistula **IIAb** (see previous fistula) within 2 cm 0 avw trauma midline, **leaking urine for 60 days = 2 mth** that started immediately following obstructed last labor for 2 days, in hospital sb female, married 23 yr ago post(menarche 5 mth earlier), still living at husband, no menstruation, no drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no eclampsia; normal ap diameter/pubic arch 85°, ar pos, cervix fixed midline
euo/f 3 cm, f/c 2 cm, i/v 12 cm 154.0 cm

operation: uvvf-repair

duration: 60 min healing 95% continence 95%

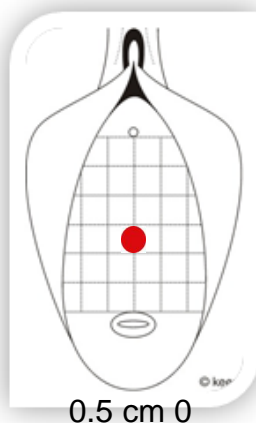
anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision thru/at fistula edge, sharp dissection, tension-free transverse bladder/urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 2.2 cm

normal bladder capacity (longitudinal diameter 12-2.2 = 10 cm)

good position of uv-junction **against** middle third of symphysis

normal-width 2 cm good-quality urethra_euo in anatomic position



RR
preanesthesia: 130/90 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

pt 064

katsina mdg

vwf 028

vwf 8028

major total circumferential trauma

a m d (katsina)

female

18 yr

08.06.11

surgeon: dr said ahmad

assistant: gambo lawal

diagnosis: PI (0 alive), residual \pm 1 cm 0 urethrovesicovaginal fistula at R following **ps last resort** 12.02.11, not living with husband, no menstruation; ?ap dia meter?/normal pubic arch 85°, ar pos, bilateral atf/atl + pc_iloc_iscm loss, cervix fixed intraabdominally pat knows: **ba hanya**
euo/f 2 cm, f/v 0 cm, ab/au 1 cm, i/v 3 cm 132.0 cm

operation: uvvf-“repair” and euo-rhaphy

last resort final

duration: 60 min

healing 70% continence 75%

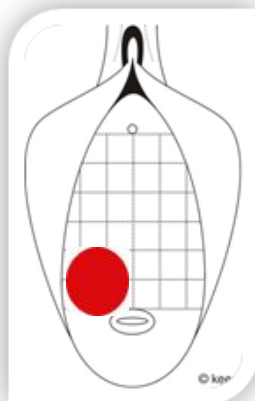
anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

incision at fistula edge, sharp dissection, tension-free oblique bladder closure by single layer of inverting serafit, triple fixation of foley ch 18, oblique avw adaptation by 2x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 7 cm, good anterior elevation and euo/b 2.1 cm

moderate bladder capacity (longitudinal diameter 7-2.1 = 5 cm)

good position of uv-junction **fixed against** middle third of symphysis

normal-width 2 cm good-quality urethra_euo in anatomic position



1 cm 0

RR
 preanesthesia: 130/70 mm Hg
 5': 120/70
 10': 120/70
 postoperation: 120/70

pt 065

katsina mdg

rvf

**total circumferential trauma + surgical "management"
documented 09.06**

vvf

k s k (bauchi)

female

25 yr

09.06.11

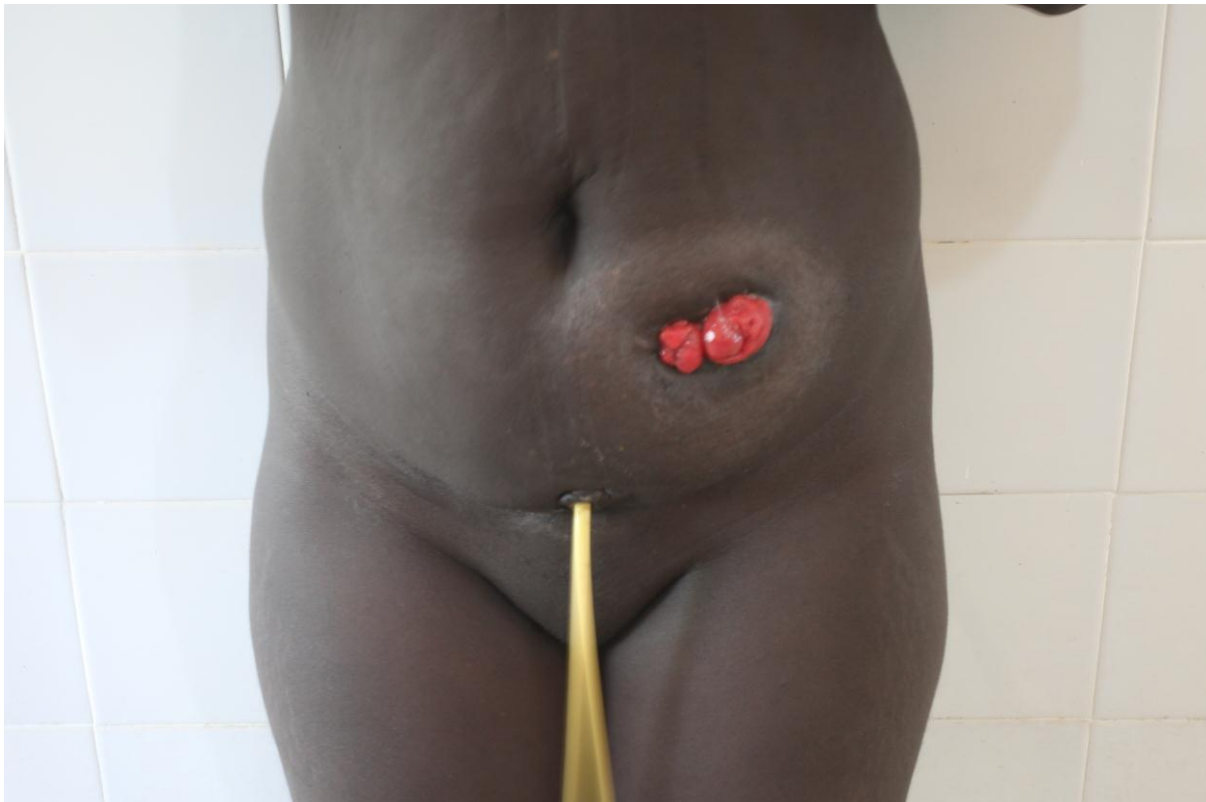
diagnosis: PIII (1 alive), **scarred** \pm 1 cm 0 rectovaginal fistula type **lb** just proximally from severe lpl stricture with elastic 2 cm 0 rectum sgtricture, type **IIAb** urine fistula, leaking urine/passing stools pv for 5 yr which started immediately following obstructed last labor for 2 days, in hospital sb male, married 12 yr ago post(menarche 3 mth earlier), not living with husband, normal men struation, bilateral drop foot for 3 mth R (grade 5) and L (grade 5), no yan kan gishiri, no eclampsia; normal ap diameter/pubis arch 85°, ar pos, "cervix" fixed midline, severe stenosis, bilateral **major** atf/atl + pc_ilc_iscm loss + ssl_pm trauma

suprapubic catheter + colostomy (jos_priv clin) for 5 yr

a/f 8 cm, f/c 1 cm, i/v 10 cm

157.0 cm

nb after suprapubic catheter and colostomy treatment was terminated



pt 066
pt

katsina mdg
minute fistula + intrinsic incontinence
rvf healed

vfv 8096/7718
rvf 982

j l f (katsina) female 17 yr 09.06.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PI (0 alive), post **IIAb/Bb** total intrinsic urine incontinence grade III, minute < 0.1 cm uvvf R following **minimum surgery** circum repair 21.10.09, not living with husband, normal menstruation, drop foot R (grade 3-4) and L (grade 5); normal AP diameter/ pubic arch 85, AR pos, slight lpl stricture, **major** bilateral atf/atl + pc_io_ilc_iscm loss + ssl_pm trauma at L, cervix mobile **open** urethra_euo posteriorly pulled inside euo/f 1.5 cm, f/c 2 cm, euo/bw 12 cm, euo/b 0.5 cm, i/v 10 cm 150.5 cm

operation: bilateral pcf refixation with fistula closure

duration: 40 min (**step-by-step teaching**) healing 95% continence 75%

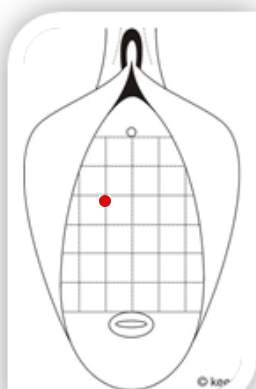
anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

minute fistula confirmed by gv

re-episiotomy L, transverse incision thru fistula/repair scar at 1.5 cm from euo, sharp dis section, excision of scar tissue +, bilateral fixation of pc fascia onto paraurethra_euo atf/symphysis by 2x serafit each side with fistula closure and normalization of euo, euo/b now 1.5 cm, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis, epi sotomy closure; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 1.5 cm normal bladder capacity (longitudinal diameter 12-1.5 = 10.5 cm)

poor position of uv-junction **fixed against** caudad third of symphysis

normal-width 1.5 cm poor-quality urethra_euo in anatomic position



< 0.1 cm 0 + intrinsic

RR
preanesthesia: 130/80 mm Hg
5': 120/70
10': 120/70
postoperation: 120/70

pt 067

katsina mdg
anterior trauma

vvf 8097

r b r (katsina)

female

37 yr

09.06.11

surgeon: dr sadiya nasir/kees waaldijk

assistant: kabir lawal

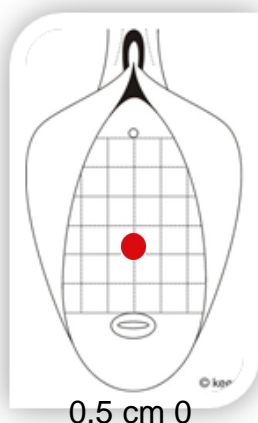
diagnosis: PX (4 alive), \pm 0.5 cm 0 urethrovesicovaginal fistula type **IIAa** midline at distal tip of 2 cm longitudinal "scar" with base at cervix, **leaking urine for 37 days** which started immediately following cs-?sth? bco obstructed last labor for 2 days, sb male, married 25 yr ago pre(menarche 1 yr later), still living with husband, no menstruation, drop foot R (grade 3-4) and L (grade 4), no rvf, no yankan gishiri, no eclampsia; normal ap diameter/wide pubic arch 90°, ar pos, "cervix" fixed midline, open post fornix
euo/f 3 cm, f/c 2 cm, i/v 11 cm 146.0 cm

operation: uvvf-repair

duration: 30 min (**personal supervision**) healing 95% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision thru/at fistula edge, sharp dissection, 1 cm 0 bladder_urethra defect, tension-free transverse bladder/urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis, post fornix adaptation by 1x serafit; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 2.7 cm normal bladder capacity (longitudinal diameter 12-2.7 = 9.5 cm)
good position of uv-junction **against** middle third of symphysis
normal-width 2.7 cm good-quality urethra_euo in anatomic position



	RR
preanesthesia:	170/100 mm Hg
5':	160/100
10':	150/90
postoperation:	140/80

pt 068

katsina mdg

wvf 8098/5740

what can one do; nicely healed but total incontinence; documented at end

h a g (bauchi)

female

28 yr

09.06.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PI, total post **IIBb** repair urine intrinsic_stress incontinence grade III
nicely healed (mutilated IIBb) urethra/avw reconstruction as **final op**
12.3.03, still living at husband, normal menstruation, successful rvf-repair,
?ap diameter?/narrow pubic arch 70°, anal reflex pos now, operated 3x
(jos_jan kwano), severe vagina stenosis/shortening, major pc muscle
loss, **ba hanya ko kadan**
euo/bw 12 cm, good elevation, euo/b 3.2 cm, i/v 2 cm 154.5 cm

operation: shortening euo-plasty + bilateral para-euo fixation **last resort final**

duration: 5 min healing 95% continence 50%

anesthesia: spinal L4/L5 with 4 ml bupivacaine 0.5%

since **euo too distal**/too near to clitoris longitudinal severeing of distal neouirethra over
0.5 cm, bilateral fixation of good-quality para-urethra tissue onto para-euo symphysis by
1x serafit each side, euo/b 2.5 cm, **no** urine thru euo on cough/suprapubic pressure,
ballooning foley ch 18; free urine flow, euo/bw 12 cm, good elevation, euo/b 2.5 cm
normal bladder capacity (longitudinal diameter 12-2.5 = 9.5 cm)
good position UV-junction **fixed against** middle third of symphysis
2.5 cm 0 **now good-quality** urethra_euo in anatomic position
so the **severe mutilation_scarring** became good-quality tissue

RR

preanesthesia: 130/80 mm Hg

5": 120/70

10": 110/70

postoperation: 100/70

pt 069

katsina mdg

wvf 8099/7927

extensive total circumferential obstetric trauma

rvf + cath

I k g d (katsina)

female

18 yr

09.06.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PI (0 alive), total post **extensive IIAb** intrinsic_stress incontinence grade III, leaking urine whilst lying/sitting/standing/walking but **no** spontaneous miction following circ repair 24.9.10, not living with husband, normal menstruation, drop foot R (grade 5) and L (grade 4-5); normal ap diameter/pubis arch 85°, AR pos, bilateral atf/atl + pc_ilc_iscm loss + ssl_pm trauma, moderate-severe vagina stenosis/shortening, transverse 5x1 cm pcf defect, cervix mobile **deformed** urethra_euo posteriorly pulled inside euo/bw 12, good elevation, euo/b 0.3 cm euo/c 1.5 cm 155.0 cm

operation: continent urethra/avw reconstruction

duration: 45 min

healing 85% continence 85%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

re-episiotomy L, wide H incision around deformed euo, sharp mobilization of para urethra tissue, tension-free longitudinal urethra reconstruction over 1.5 cm by single layer of inverting serafit, bilateral fixation of pc fascia onto para_euo atf/symphysis by 1x serafit each side, euo/b 1.5 cm, **no** urine thru euo on rest/cough/pressure, triple fixation of foley ch 18, avw reconstruction by avw_cervix advancement flap by 2-point fixation onto para-euo symphysis by 1x seralon each side, check on hemostasis, episiotomy closure; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 1.5 cm (**circ loss**) normal bladder capacity (longitudinal diameter 12-1.5 = 10.5 cm) acceptable position of uv-junction **fixed against** middle/caudad third of symphysis normal-width 1.5 cm medium- to good-quality urethra_euo in anatomic position this really has a fair chance of continence

RR

preanesthesia: 140/90 mm Hg

5': 130/80

10': 130/80

postoperation: 130/80

pt 070

katsina mdg
anterior trauma

vvf 029

h m t (katsina)

female

33 yr

09.06.11

surgeon: dr idris a halliru

assistant: gambo lawal

diagnosis: PVI (3 alive), total post **IIAb** urine intrinsic_stress incontinence grade III, leaking urine whilst lying/sitting/standing/walking + **no** spontaneous miction following repairs 25.6.05 + 16.04.06 (b/r-id), leaking urine for 6 yr that started immediately following obstructed last labor for 1 day, in hospital sb male, married 21 yr ago pre(menarche 1 yr later), still living with husband, normal menstruation, drop foot R (grade 3) and L (grade 5), no rvf, no yan kan gishiri, no h/o eclampsia; normal ap diameter/pubis arch 85°, ar pos, cervix mobile, operated 3x (b/r)
euo/f 10 cm, good elevation, euo/b 1 cm, i/v 10 cm 152.0 cm

operation: bilateral pc fascia fixation

duration: 30 min healing 95% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision at 2 cm from euo thru previous repair scar, sharp dissection, bilateral fixation of pc fascia onto paraurethra_euo atf/symphysis by 2x serafit each sided, **no** urine thru euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 10 cm, good anterior elevation, euo/b 3.5 cm
normal bladder capacity (longitudinal diameter 10-3.5 = 6.5 cm)
good position of uv-junction **against** middle third of symphysis
normal-width 3.5 cm medium-quality urethra_euo in anatomic position

RR
preanesthesia: 140/90 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

pt 071

katsina mdg vvf 031 vvf 7472/1970/./3577

last resort; excessive scarring

h u b (kano)

female

30 yr

09.06.11

surgeon: dr said ahmad

assistant: gambo lawal

diagnosis: PI (0 alive), impacted 4x3x2 cm bladder stone + small fistula following multiple repairs, not living with husband, normal menstruation until 4 yr ago when she developed bladder stone, no (h/o) drop foot, no RVF; normal AP diameter/small pubic arch 60°, AR pos, major pc_ilc_ iscm loss cystostomy + stone removal 15/8-07 (b/r-acquire)
euo/c 2 cm 151.0 cm

operation: vaginal removal of stone

duration: 35 min

healing

continence

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision thru fistula, removal of stone in one piece, flushing out debris from bladder, leaving everything open
for repair in 3 mth

RR

preanesthesia: 130/80 mm Hg

5': 130/80

10': 130/80

postoperation: 130/80

pt 072
pt

katsina mdg
card burned

vvf 030
vvf 1489/./3875

?h i b?

h s b (katsina)

female

29 yr

09.06.11

surgeon: dr idris a halliru

assistant: gambo lawal

diagnosis: PIII (0 alive), acute retention of urine, leaking urine for 10 yr which started immediately following obstructed 1st labor x 3 days, in hospital sb female, married 16 yr ago pre(menarche 4 mth later), still living with husband, normal menstruation, drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no eclampsia; normal ap diameter/pubis arch 85°, ar pos, cervix mobile, operated 3x
euo/f cm, f/c cm, i/v cm 153.0 cm

operation: dilatation + foley ch 18

duration: 10 min

healing

continence

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

gentle gradual dilatation from H3 thru H 16, foley ch 18; free urine flow, euo/bw 14 cm, good anterior elevation, euo/b 2 cm
normal bladder capacity (longitudinal diameter 14-2 = 12 cm)
acceptable position of uv-junction **against** middle/caudad third of symphysis
normal-width 2 cm good-quality urethra_euo in anatomic position

RR
preanesthesia: 130/80 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

pt 073

katsina mdg

vvf 032

vvf 7682/7787
cath aalae
rvf

s a f (katsina)

female

32 yr

09.06.11

surgeon: said ahmad

assistant: gambo lawal

diagnosis: PVIII (7 alive), total post **very extensive IIBb** urine intrinsic stress incontinence grade III following multiple repairs 4.8.09 to 24.2.10, leaking whilst lying/sitting/standing/walking + normal miction, still living with husband, normal menstruation, drop foot R (grade 5) and L (grade 5); normal ap diameter/wide pubic arch 90°, ar pos, bilateral major atf/atl + pc_io_ilc_iscm loss open euo pulled posteriorly inside euo/bw 13 cm, poor elevation, euo/b 0.2 cm, i/v 10 cm 160.5 cm

operation: urethralization + bilateral pcf fixation

duration: 50 min

healing 95% continence 60%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision agt 2 cm from euo, sharp dissection, rhapsy of fascia at 2-5 cm from euo by serafit, bilateral fixation of pc fascia onto paraurethra-euo atf by 2x serafit each side, **no** urine thru euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 13 cm, good anterior elevation, euo/b 2.1 cm
good bladder capacity (direct longitudinal diameter 13-2.1 = 11 cm)
goodr position of UV-junction **against** middle/caudad third of symphysis
normal-width 2 cm good-quality urethra_euo in anatomic position

RR

preanesthesia: 130/80 mm Hg

5': 130/80

10': 130/80

postoperation: 130/80

pt 074
pt

katsina
second obstetric leakage

cath 1354
vuf 5622

d m s (katsina)

female

30 yr

09.06.11

diagnosis: PIX (2 alive), total post **IIAb** delivery intrinsic_stress incontinence grade III as "healing phase" of atonic bladder, leaking urine + "spontaneous" miction for 3 mth which started immediately following tah-cs bco obstructed last labor of < 1 day, sb male, married 18 yr ago pre(menarche 1 yr later), still living with husband, no menstruation, no drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no eclampsia; normal ap diameter/pubis arch 85°, ar pos, "cervix" retracted midline
avw bulging 158.5 cm

09.06.11 no suprapubic mass, avw bulging into the vagina, bladder overdistended (euo/bw 18 cm, poor anterior elevation after draining > 500 ml urine, euo/b 1 cm foley ch 18; free urine flow **increased** bladder capacity (longitudinal diameter 18-1 = 17 cm, **atonic bladder**)
poor position of uv-junction **against** caudad third of symphysis
normal-width 1 cm medium-quality urethra_euo in anatomic position

pt 075

katsina

cath 1355

anterior/posterior trauma/sacral plexus trauma

b i d (katsina)

female

15 yr

09.06.11

diagnosis: PI (0 alive), total urine intrinsic_stress incontinence grade III, **leaking of urine/stool/flatus incontinence for 21 days** which started immediately following obstructed labor for 4 days, in hospital sb male, married 3 yr ago pre(menarche 1 yr later), not living with husband, no menstruation, drop foot R (grade 3) and L (grade 3-4), no rvf, no yankan gishiri, eclampsia no; normal ap diameter/pubis arch 85°, ar **slightly** pos, **stool/flatus incontinence, saddle anesthesia** **no spontaneous miction**
distal 2 cm avw **traumatized/indurated** 156.5 cm

09.06.11 foley ch 18; free urine flow, euo/bw 8 cm, good anterior elevation and euo/b 1 cm
normal bladder capacity (longitudinal diameter 8-1 = 7 cm)
poor position of uv-junction **against** caudad third of symphysis
normal-width 1 cm poor-quality urethra_euo pulled inside
visible stool incontinence

pt 076

katsina mdg

rvf 1025

**total circumferential trauma + surgical "management"
documented 09.06**

vvf

k s k (bauchi)

female

25 yr

10.06.11

surgeon: kees waaldijk

assistant: kabir lawal

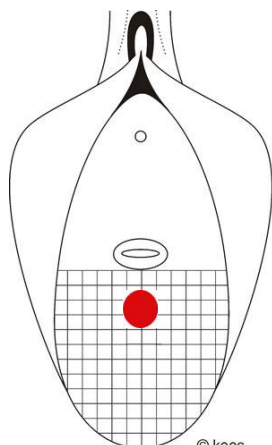
diagnosis: PIII (1 alive), **scarred** ± 1 cm 0 rectovaginal fistula type **Ib** just proximally from severe lpl stricture with elastic 2 cm 0 rectum sgtricture, type **IIAb** urine fistula, leaking urine/passing stools pv for 5 yr which started immediately following obstructed last labor for 2 days, in hospital sb male, married 12 yr ago post(menarche 3 mth earlier), not living with husband, normal men struation, bilateral drop foot for 3 mth R (grade 5) and L (grade 5), no yan kan gishiri, no eclampsia; normal ap diameter/pubic arch 85°, ar pos, "cervix" fixed midline, severe stenosis, bilateral **major** atf/atl + pc_ilc_iscm loss + ssl_pm trauma
suprapubic catheter + colostomy (jos_priv clin) for 5 yr
a/f 8 cm, f/c 1 cm, i/v 10 cm 157.0 cm

operation: **ps-like** rvf-repair preference of patient

duration: 30 min healing 85% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

RE/ blunt posterior disruption of stricture
episiotomy L with bilateral severing of severely scarred lpl stricture, incision at fistula edge with small bilateral transverse extension, excision of scar tissue ++, **ps-like** cervix _pvw/pvw closure by 2x everting seralon, check on hemostasis, episiotomy closure if healed for colostomy closure



scarred 1 cm 0

RR
preanesthesia: 140/90 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

pt 077

katsina mdg

vvf 8100

span too wide; posterior trauma

r i j (katsina)

female

37 yr

10.06.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PV (4 alive), cystocele_3° cervix prolapse_rectocele without genuine stress incontinence, something coming out of vagina urine for 20 yr which started spontaneously following obstructed 2nd labor for 1 day, at home live female, married 25 yr ago pre(menarche 6 mth later), still living with husband, normal menstruation, drop foot R (grade 5) and L (grade 5), no vvf/rvf, no yankan gishiri, no eclampsia; normal ap diameter/**wide** pubic arch 100°, ar pos, **no** decubitus ulcer cervix
euo/c 8 cm **never** leaking urine **narrow** urethra_euo in anat pos
no objective stress incontinence (also not after reduction)
euo/bw 19 cm, poor elevation, euo/b 1.5 cm, i/v 13 cm 161.0 cm

operation: cervix suspension at L

duration: 15 min (**step-by-step teaching**) healing 95% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

small avw incision avw ruga fold with transverse extension up to cervix, sharp dissection to create wound area/surface, paravesical space free, fixation of cervix (with adherent pc fascia) onto L superior pubic bone/pc_ilc_iom/atf/atl by 2x seralon, euo/b cm, **no** urine thru euo on rest/cough/pressure, foley ch 18, check on hemostasis; free clear urine flow, euo/bw 19 cm, good elastic anterior elevation at L, rotational descent at R, euo/b 3.0 cm (**re-urethralization**) good cervix fixation
increased bladder capacity (longitudinal diameter 19-3.0 = 16 cm)
good position of uv-junction **against** middle third of symphysis
normal-width 3 cm good-quality urethra_euo in anatomic position

RR

preanesthesia: 140/80 mm Hg

5': 130/80

10': 130/80

postoperation: 130/80

pt 078

katsina mdg

vvf 8101/7776/7968

extensive total circumferential trauma

rvf

m h d (katsina)

female

16 yr

10.06.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PI (0 alive), total post **extensive "inoperable" IIBb** urine intrinsic_stress incontinence grade III, leaking urine whilst lying/sitting/standing/walking + spontaneous miction after multiple repairs 19.2 to 15.11.10, not living with husband, normal menstruation, drop foot R (grade 5) and L (grade 5); normal ap diameter/pubis arch 85°, ar pos, **major** bilateral atf/atl + pc_io_iloc_iscm loss + ssl_pm trauma, cervix fixed midline **against** sacrum, severe vagina stenosis **deformed** euo pulled posteriorly inside euo/bw 11 cm, good elevation, euo/b 0.9 cm i/v 10 cm 144.5 cm

operation: bilateral fascia/avw fixation

last resort final

duration: 20 min

healing 90% continence 50%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

gv/ **no** leaking

transverse incision at 1.5 cm from euo thru repair scar, sharp dissection, bilateral fixation of pc fascia/avw onto para_euo atf/symphysis by 1x seralon with normalization of euo, euo/b now 1.8 cm, **no** urine thru euo on rest/cough/pressure, ballooning foley ch 18, check on hemostasis; free urine flow, euo/bw 11 cm, good anterior elevation and euo/b 1.8 cm (compression)

normal bladder capacity (longitudinal diameter 11-1.8 = 9 cm)

poor position of UV-junction **fixed against** caudad third of symphysis

normal-width 2 cm poor-quality urethra_euo in anatomic position

the problem: though nicely healed everything fixed pulling onto post urethra wall

RR

preanesthesia: 120/80 mm Hg

5': 120/70

10': 110/70

postoperation: 110/70

h s k (katsina) female 20 yr 10.06.11

surgeon: dr idris a halliru

assistant: gambo lawal

diagnosis: PI (0 alive), total **IIAb** urine intrinsic_stress incontinence, leaking urine whilst lying/sitting/standing/walking + no spontaneous miction following **early** circum repair 22/7-06 + pcf fixation 18.11.06 + urethralization 24.2.10, still with husband, normal menstruation, drop foot R (grade 5) and L (grade 5); normal ap diameter/pubic arch 85°, ar pos euo/c 4 cm **open** 1 cm urethra_euo posteriorly pulled inside by fixed cervix euo/bw 14 cm, good elevation, euo/b 1.5 cm, i/v 10 cm 152.0 cm

operation: bilateral pcf (re)fixation **last resort final**

duration: 30 min healing 95% continence 75%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

gv check/ **no** leakage urine level in accord with respiration
 transverse curved incision at 1.5 cm from euo thru op scar, sharp dissection, poor tissue quality, bilateral fixation of poor-quality pcf/avw onto paraurethra_euo atf/sym physis by 2x serafit each side with repositioning/stabilizing urethra_euo, now euo/b 3.25 cm, **no** urine thru euo on rest/cough/ pressure, triple fixation of FOLEY Ch 18, transverse avw/avw_cervix adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 14 cm, good anterior elevation, euo/b 3.2 cm (**compression**) normal bladder capacity (longitudinal diameter 14-3.2 = 11 cm) good position UV-junction **against** middle third symphysis normal-width 3 cm medium-quality urethra_euo in anatomic position
problem: continuous pull/traction by fixed cervix
 small piece of broken needle at L could not be retrieved

RR
 preanesthesia: 130/80 mm Hg
 5': 130/80
 10': 120/70
 postoperation: 120/70

pt 080
pt

katsina mdg

vvf 034

vvf 5737/./7094
rvf 723

z a m (borno)

female

25 yr

10.06.11

surgeon: dr idris a halliru

assistant: gambo lawal

diagnosis: PI, post **extensive IIBb** intrinsic_stress incontinence grade I following multiple repairs 11.3.03 to 26.5.07, not living at husband, drop foot R (grade 4) and L (grade 3), no yankan gishiri; normal ap diameter/pubis arch 85°, operated 2x (maiduguri), anal reflex pos
euo/bw 14 cm, good elevation, euo/b 1cm, i/v 5 cm 151.0 cm

operation: bilateral fascia fixation

duration: 30 min

healing 85% continence 60%

anesthesia: spinal L4/L5 with 4 ml bupivacaine 0.5%

transverse incision at 1.5 cm from euo, sharp dissection, bilateral fixation of pc fascia onto paraurethra_euo atf by 2x serafit each side, **no** urine thru euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 14 cm, good elevation, euo/b 4 cm normal bladder capacity (longitudinal diameter 14-4 = 10 cm)
good position of uv-junction **against** middle third of symphysis
normal-width 4 cm medium-quality urethra_euo in anatomic position

RR

preanesthesia: 130/80 mm Hg

5": 120/70

10": 120/70

postoperation: 120/70

pt 081

katsina mdg vvf 035
actually inoperable IIBb

vvf 7325/7164
rvf 893

s m b (zamfara)

female

20 yr

10.06.11

surgeon: dr said ahmad

assistant: gambo lawal

diagnosis: **new** \pm 0.5x0.1 cm longitudinal urethrovesicovaginal fistula midline, somebody must have made a cut since it was definitely healed (as seen by myself), multiple ""repairs"" 13.07.07 to 19.1.08, normal menstruation, drop foot R (grade 5) and L (grade 5), RVF **healed**; ?AP diameter?/pubic arch 85°, AR pos, **ba hanya**
euo/f 1 cm, f/c 1 cm, i/v 5 cm

148.5 cm

operation: uvvf-""repair"" + euo-rhaphy

duration: 60 min

healing 75% continence 50%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

longitudinal incision thru fistula, sharp dissection, tension-free longitudinal closure with euo rhaphy, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, longitudinal avw adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 13 cm, good anterior elevation, euo/b 2.5 cm normal bladder capacity (longitudinal diameter 13-2.5 = 10.5 cm) good position of UV-junction **against** middle third of symphysis normal-width 2.5 cm poor-quality urethra_euo in anatomic position
the **problem: everything fixed**

RR

preanesthesia: 150/100 mm Hg

5': 140/90

10': 130/80

postoperation: 130/80

pt 082
pt

katsina mdg
"inoperable" fistula

vvf 036

vvf 6285
rvf 728

h a b (zamfara)

female

24 yr

10.06.11

surgeon: dr said ahmad

assistant: gambo lawal

diagnosis: total post **extensive IIAb** urine intrinsic_stress incontinence grade III, leaking urine whilst lying/sitting/standing/walking/no spontaneous miction following repair 28.9.04, not living at husband, normal menstruation, drop foot R (grade 5) and L (grade 4-5); normal AP diameter/narrow pubic arch 50°, major pc muscle, **RVF healed**, severe vagina stenosisl
euo/bw 7 cm, good elevation, euo/b 1cm, i/v 4 cm 144.0 cm

operation: urethralization by bilateral fixation

duration: 50 min healing 85% continence 50%

anesthesia: spinal L3/L4 with 4 ml bupivacaine 0.5%

transverse incision at 1 cm from euo, sharp dissection, bilateral fixation of pc fascia onto paraurethra_euo atf by 2x serafit each side, **no** urine thru euo on rest/cough/pressure, re-episiotomy, R ureter identified but blocked at 3 cm, incision at fistula edge, fixation of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 7 cm, good anterior elevation, euo/b 2 cm normal bladder capacity (longitudinal diameter 7-2 = 5 cm)
acceptable position of UV-junction **against** middle/caudad third of symphysis
normal-width 2 cm poor-quality urethra_euo in anatomic position

RR
preanesthesia: 130/80 mm Hg
5': 120/70
10': 120/70
postoperation: 120/70

major total circumferential trauma; referred from zaria too complicated

n z b (kaduna)

female

17 yr

11.06.11

surgeon: kees waaldijk

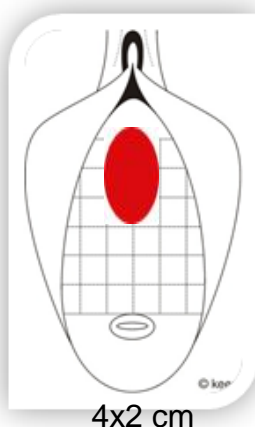
assistant: kabir lawal

diagnosis: PI (0 alive), \pm 4x2 cm urethrovesicovaginal fistula type **IIBb** with circumferential defect, leaking urine for 8 mth that started immediately following cs bco obstructed labor for 2 days, sb male, married 2 yr ago post(menarche 2 yr earlier), not living with husband, no menstruation, drop foot R (grade 4) and L (grade 4), no rvf, no yankan gishiri, eclampsia yes; normal ap diameter/pubis arch 85°, ar pos, bilateral atf/atl + pc_iloc_iscm loss, cervix fixed midline, severe scarred distal circ stricture (**ba hanya**) only 2 cm distal anterior/lateral urethra walls intact
euo/f 0 cm, f/c 4 cm, ab/au 2 cm, i/v 8 cm 152.0 cm

operation: circumferential bladder fixation as **first stage minimum surgery**duration: 40 min (**step-by-step teaching**) healing 95% continence 5%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

episiotomy L with severing of stone-hard scarred stricture, transverse incision thru proximal fistula edge, sharp circumferential dissection, advancement/caudad fixation of anterior bladder onto symphysis/urethra into "euo", tension-free circumferential bladder fixation into euo by single layer of inverting serafit, **no** urine thru suture euo on rest/cough but still + on pressure, triple fixation of foley ch 18, transverse avw closure by avw advancement flap picking up pcf as well by 2-point fixation onto paraeuo symphysis by 1x everting seralon each side, check on hemostasis, episiotomy closure; free urine flow, euo/bw 9 cm, good anterior elevation, euo/b 1 cm (**compression**)
normal bladder capacity (longitudinal diameter 9 cm, direct) **fine repair**
poor position of uv-junction **fixed against** caudad third of symphysis
normal-width 1 cm good-quality "urethra" euo in anatomic position
nice result (looks normal) for continent urethra/avw as **second stage**



RR
preanesthesia: 140/90 mm Hg
5': 130/80
10': 120/70
postoperation: 120/70

pt 084

katsina mdg

vvf 8103

post IIAb repair; anterior gap from 11-13 hr after sphincter ani repair

h a l (nasarawa)

female

23 yr

11.06.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PII (0 alive), post **IIAb** total urine intrinsic_stress incontinence grade III, leaking urine whilst lying/sitting/standing/walking (+ spontaneous miction) for 6 yr which started immediately following obstructed last labor for 5 days, at home sb male, married 10 yr ago post(menarche 1 mth earlier), not living with husband, normal menstruation, drop foot R (grade 4) and L (grade 2-3 with contracture up to 90/0° dorsiflexion), no rvf; normal ap diameter/wide pubic arch 90°, ar pos, "cervix" not identified fixed, operated 1x for vvf/rvf (jan kwano) severe funnel shape stenosis
euo/4 cm **open** urethra_euo posteriorly drawn inside
euo/bw 13 cm, good elevation, euo/b 2.2 cm, i/v 5 cm 152.0 cm

operation: paraurethra_euo fixation of pc fascia complete stool/flatus continence

duration: 30 min healing 95% continence 60%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

100 ml gv: **no** leakage urine level in accord with respiration
transverse incision at 2 cm from euo thru repair scar, sharp dissection, bilateral fixation of fascia onto para-euo symphysis/atf by 1x seralon each side, euo/b now 3.2 cm, **no** urine thru euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon trying to neutralize traction by fixed "cervix"/vault, check on hemostasis; free urine flow, euo/bw 13 cm, good anterior elevation, euo/b 3.2 cm normal bladder capacity (longitudinal diameter 13-3.2 = 10 cm)
good position of uv-junction **fixed against** middle third of symphysis
normal-width 3 cm medium-quality urethra_euo in anatomic position
the **problem: severe scar tissue + everything fixed pulling onto post urethra wall**

RR

preanesthesia: 140/90 mm Hg

5': 130/80

10': 130/80

postoperation: 130/80

pt 085

katsina mdg
anterior trauma

vvf 037

n z u m (rèp niger) female

24 yr

11.06.11

surgeon: dr said ahmad

assistant: gambo lawal

diagnosis: PVI (1 alive), \pm 0.5 cm 0 urethrovesicovaginal fistula L type **IIAa**, leaking urine for 9 yr which started immediately following obstructed first labor for 2 days, in hospital sb male, married 12 yr ago pre(menarche 1 yr later), not living with husband, normal menstruation, bilateral drop foot for 2 mth R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/pubis arch 85°, ar pos, cervix mobile, operated 1x (da magaram) **open** urethra_euo pulled posteriorly inside
euo/f 2 cm, f/c 3 cm, i/v 11 cm 148.0 cm

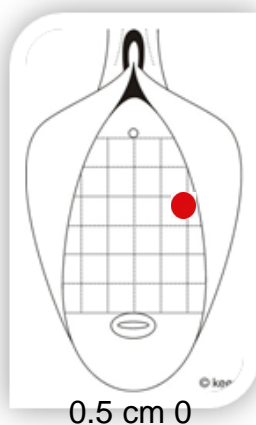
operation: uvvf-repair + euo rhaphy

duration: 60 min

healing 85% continence 85%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision thru/at fistula edge, sharp dissection, tension-free transverse bladder/urethra closure by single layer of inverting serafit, euo-rhaphy, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 13 cm, good anterior elevation, euo/b 1.5 cm
normal bladder capacity (longitudinal diameter 13-1.5 = 11.5 cm)
poor position of uv-junction **against** caudad third of symphysis
normal-width 1.5 cm medium-quality urethra_euo in anatomic position



	RR
preanesthesia:	130/80 mm Hg
5':	120/70
10':	120/70
postoperation:	120/70

pt 086

katsina mdg
caustics

vvf 038
cath 1312

d a d m (katsina)

female

62 yr

11.06.11

surgeon: dr said ahmad

assistant: gambo lawal

diagnosis: PXI (4 alive), \pm 0.2 cm 0 urethrovesicovaginal fistula midline type I, leaking urine for 1 yr which started following application of magani gargajiya once daily for reasons not known, married 51 yr ago pre(menarche 2 yr later), not living with husband, menopause 15 yr ago, drop foot R (grade) and L (grade), no rvf, no yankan gishiri, eclampsia; normal AP diameter/pubis arch 85°, AR pos
euo/f 5 cm, f/c 1 cm, i/v 12 cm 152.0 cm

operation: vvvf-repair

duration: 50 min healing 85% continence 90%

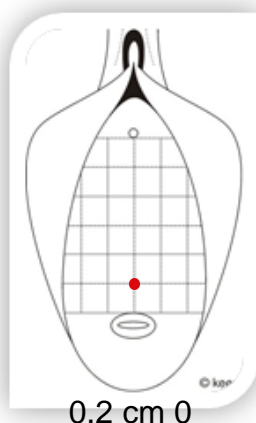
anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision thru/at fistula edge, sharp dissection, tension-free transverse bladder by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 12 cm, moderate anterior elevation and euo/b 2.5 cm

normal bladder capacity (longitudinal diameter 12-2.5 = 9.5 cm)

good position of uv-junction **against** middle third of symphysis

normal-width 2.5 cm good-quality urethra_euo in anatomic position



	RR
preanesthesia:	180/110 mm Hg
5':	160/100
10':	160/100
postoperation:	160/90

pt 087
pt

katsina
second obstetric fistula
total circumferential trauma

vvf 8104
vvf 4164/4336
cath 586

h u d (kano)

female

31 yr

12.06.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PVII (1 alive), **new extensive** ± 6 cm 0 urethrovesicovaginal fistula **IIBb** whereby anterior bladder edge fixed onto cephalad symphysis, leaking urine for 2 yr which started immediately following obstructed last labor for < 1 day, at home live female, married 19 yr ago pre(menarche 1 yr later), not living with husband, normal menstruation, drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no eclampsia; normal pubic arch/ small ap diameter 70°, **major** bilateral atf/atl + pc_io_ilc_iscm loss, more or less ok until pat say PIV with several miscarriages urethra block euo/f 2 cm, ab/au 1 cm, f/c 2 cm, i/v 8 cm cervix mobile 146.0 cm

operation: **ps-like** 4/5 circumferential uvvf-repair as **minimum surgery** **final**

duration: 30 min

healing 75% continence 60%

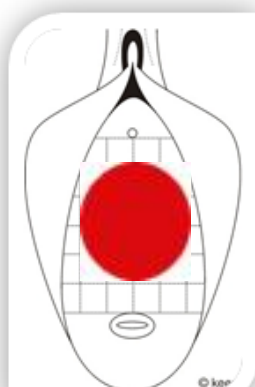
anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

deblocking urethra, ureters visible and easy to catheterize but incision at fistula edge, sharp **minimal** 4/5 circumferential dissection, **ps-like** 4/5 circumferential avw closure by 10x everting seralon, **no** urine thru euo on rest/cough/pressure, triple fixation of foley ch 18 and check on hemostasis; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 2.0 cm

normal bladder capacity (longitudinal diameter 12-2.0 = 10 cm)

acceptable position of uv-junction **fixed against** middle/caudad third of symphysis

normal-width 2 cm poor-quality urethra_euo in anatomic position



extensive 6 cm 0

RR
preanesthesia: 130/80 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

pt 088

katsina

vvf 8105

extensive anteriopilateral trauma; long-standing non-drinking

h t c (katsina)

female

40 yr

12.06.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PI (0 alive), **extensive** ± 2 cm 0 urethrovesicovaginal fistula type **IIAb** with circumferential defect, leaking urine for 25 yr which started immediately following obstructed labor for 3 days, in hospital sb male, married 28 yr ago pre(menarche 1 yr later), still living at husband, normal menstruation, drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, eclampsia yes; normal ap diameter/ pubic arch 85°, ar pos, **major** bilateral atf/atl + pc_io_ilc_iscm loss, cervix fixed midline vault, operated 3x, vaginal stone removal 3.1.11 (b/r_id) obesity ++ actually **inoperable**
euo/f 2 cm, f/c 0.5 cm, ab/au 1 cm, i/v 9 cm 160.0 cm

operation: **complicated ps-like** uvvf-repair

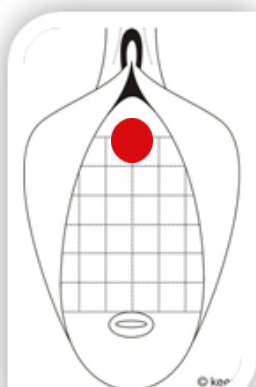
last resort final

duration: 30 min

healing 50% continence 10%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

small re-episiotomy L, incision at fistula edge, since everything **fixed** only thing possible is **ps-like** avw/avw_cervix approximation by 6x everting serafit whereby “urethra” pulled inside since cervix totally fixed, triple fixation of foley ch 18, check on hemostasis, skin closure; free urine flow, euo/bw 8 cm, good anterior elevation, euo/b 1.5 cm moderate bladder capacity (longitudinal diameter 8-1.5 = 6.5 cm) good position of uv-junction **fixed against** middle third of symphysis since deformed 1.5 cm poor-quality urethra_euo pulled inside
the **problem: long-standing not drinking, everything fibrosed/fixed**



extensive 2 cm 0

RR
preanesthesia: 180/100 mm Hg
5': 170/90
10': 150/90
postoperation: 140/80

pt 089
pt 090

kano mdg
total circumferential

vvf 4622
rvf 758

d s k (kano) female 19 yr 27.06.11

surgeon: kees waaldijk

assistant: binta musa

diagnosis: PIII (0 alive), **complicated** ± 2.5 cm 0 urethrovesicovaginal fistula at mid line type **IIAa**, ± 0.5 cm 0 rectovaginal fistula midline type **Ia**, leaking urine /passing stools pv for 7 mth that started immediately following obstructed labor for few hors at home, in hosp (2 days) danbatta sb male, married 6 yr ago pre(menarche 3 mth later), not living with husband, normal menstruation, drop foot R (grade 2) and L (grade 2) both with contracture up to 90/0° dorsiflexion, no yankan gishiri, no eclampsia; normal ap diameter /pubic arch 85°, ar pos, cervix fixed midline, atf/atl + pc_ilc_iscm loss at R euo/f 3 cm, f/c 0 cm, a/f 9, f/c 0 cm, i/v 10 cm 149 cm

operation: bilateral ureters + uvvf-repair + rvf-repair slight lpl stricture

duration: 45 min (**step-by-step teaching**) healing 85_95% continence both 95%

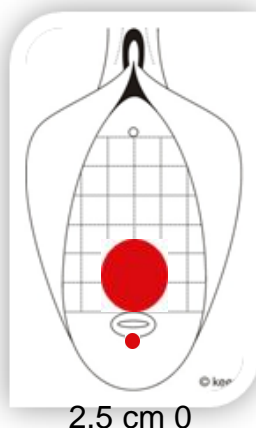
anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

episiotomy L with severing of stricture, bilateral ureter catheterization by metal sound up to 10 cm, incision at fistula edge, sharp dissection, tension-free transverse bladder/urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw/cervix adaptation by 2x everting seralon; free urine flow, euo/bw 8 cm, good anterior elevation, euo/b 2.5 cm moderate bladder capacity (longitudinal diameter 8-2.5 = 5.5 cm)

good position of uv-junction **against** middle third of symphysis

normal-width 2.5 cm medium-quality urethra_euo in anatomic position

RE/ no rectum stricture, transverse incision thru/at fistula edge thru posterior cervix, **no** dissection, tension-free transverse cervix/rectum closure by 2x inverting serafit, check on hemostasis, skin closure



RR
preanesthesia: 130/80 mm Hg
5': 120/70
10': 120/70
postoperation: 120/70

pt 090
pt 089

kano mdg
total circumferential

rvf 758
vfv 4622

d s k (kano) female 19 yr 27.06.11

surgeon: kees waaldijk

assistant: binta musa

diagnosis: PIII (0 alive), **complicated** ± 2.5 cm 0 urethrovesicovaginal fistula at mid line type **IIAa**, ± 0.5 cm 0 rectovaginal fistula midline type **Ia**, leaking urine /passing stools pv for 7 mth that started immediately following obstructed labor for few hors at home, in hosp (2 days) danbatta sb male, married 6 yr ago pre(menarche 3 mth later), not living with husband, normal menstruation, drop foot R (grade 2) and L (grade 2) both with contracture up to 90/0° dorsiflexion, no yankan gishiri, no eclampsia; normal ap diameter /pubic arch 85°, ar pos, cervix fixed midline, atf/atl + pc_ilc_iscm loss at R euo/f 3 cm, f/c 0 cm, a/f 9, f/c 0 cm, i/v 10 cm 149 cm

operation: bilateral ureters + uvvf-repair + rvf-repair slight lpl stricture

duration: 45 min (**step-by-step teaching**) healing 85_95% continence both 95%

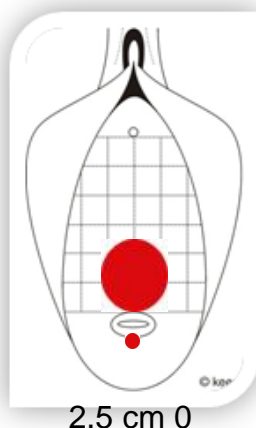
anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

episiotomy L with severing of stricture, bilateral ureter catheterization by metal sound up to 10 cm, incision at fistula edge, sharp dissection, tension-free transverse bladder/urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw/cervix adaptation by 2x everting seralon; free urine flow, euo/bw 8 cm, good anterior elevation, euo/b 2.5 cm moderate bladder capacity (longitudinal diameter 8-2.5 = 5.5 cm)

good position of uv-junction **against** middle third of symphysis

normal-width 2.5 cm medium-quality urethra_euo in anatomic position

RE/ no rectum stricture, transverse incision thru/at fistula edge thru posterior cervix, **no** dissection, tension-free transverse cervix/rectum closure by 2x inverting serafit, check on hemostasis, skin closure



RR
preanesthesia: 130/80 mm Hg
5': 120/70
10': 120/70
postoperation: 120/70

pt 091
pt

kano mdg
now obstetric fistula

vvf 4623/4466
vfv 2792
rvf 418

h s d (kano) female 21 yr 27.06.11

surgeon: kees waaldijk

assistant: binta musa

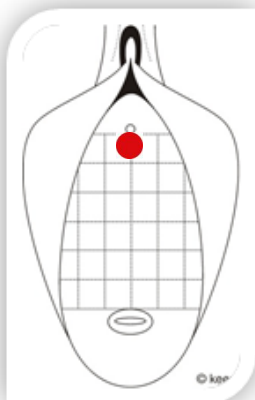
diagnosis: PI (0 alive), total post **IIBa** intrinsic_stress incontinence grade III, leaking whilst lying/sitting/standing/walking + "normal" miction following multiple urethra reconstruction 20.11.02 to 21.06.10, not living with husband, normal menstruation, rvf **healed**, growth was removed from vagina by ungozoma at 2 yr of age; normal ap diameter/wide pubic arch 90°
"urethra"_euo completely drawn inside over 1 cm, euo/c 0.5 cm 152.0 cm
euo/bw 11 cm, euo/b 0.5 cm, i/v 5 cm

operation: continent euo-rhaphy/urethra/fascia/avw "reconstruction"

duration: 20 min healing 85% continence 50%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

wide H incision around euo, sharp dissection, sharp mobilization of (para)urethra tissue, tension-free longitudinal urethra reconstruction over 1 cm with repositioning of retracted uv-junction by single layer of inverting interrupted serafit, bilateral fixation of pc fascia onto paraeuo atf/symphysis by 1x serafit each side, euo/b 1.3 cm, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, avw reconstruction by avw/cervix advancement flap by 2-point fixation onto paraurethra atf/symphysis by everting seralon, check on hemostasis; free urine flow, euo/bw 11 cm, good anterior elevation, euo/b 1.3 cm if healed for **narrowing** introitus plasty
normal bladder capacity (longitudinal diameter 11-1.3 = 10.5 cm)
good position uv-junction **against** middle third symphysis since
normal-width 1.5 cm poor-quality urethra_euo completely pulled inside



RR
preanesthesia: 130/80 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

pt 092

kano mdg
anterior trauma

vvf 001

u a g-b (kano)

female

15 yr

27.06.11

surgeon: dr idris suleiman abubakar

assistant: hafsat ibrahim

diagnosis: PI (0 alive), \pm 2 cm 0 urethrovesicovaginal fistula type **IIAa** mdilne, leaking urine for 3 mth which started immediately following obstructed labor for 2 days, in hospital mmsh sb male, married 2 yr ago pre(menarche 1 mth later), still living with husband, no menstruation, no drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, eclampsia yes; normal ap dia meter/pubic arch 85°, ar pos, cervix mobile
euo/f 3 cm, f/c 3 cm, i/v 14 cm

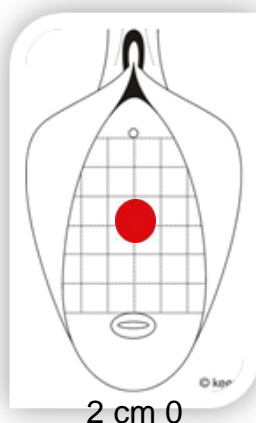
149 cm

operation: uvvf-repair

duration: 45 min (**step-by-step teaching**) healing 80% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

episiotomy R, transverse incision thru/at fistula edge, sharp dissection, tension-free transverse bladder/urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse aww adaptation by 3x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 11 cm, good anterior elevation, euo/b 3 cm
normal bladder capacity (longitudinal diameter 11-3 = 8 cm)
good position of uv-junction **against** middle third of symphysis
normal-width 3 cm good-quality urethra_euo in anatomic position



	RR
preanesthesia:	120/70 mm Hg
5':	120/70
10':	120/70
postoperation:	120/70

f y g-g (kano city)

female

20 yr

28.06.11

surgeon: kees waaldijk

assistant: binta musa

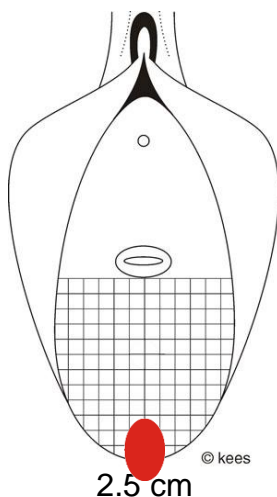
diagnosis: PI (alive), breakdown of **mutilated** sphincter ani rupture type **IIb** with 2.5 cm longitudinal anorectum trauma with tissue bridge at anus following early closure 17.5.11, now **58 days pp**, still with husband, no menstruation, no drop foot R (grade 5) and L (grade 5), no vvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/**wide** pubic arch 95°, ar pos, immediate suturing 1x pp, obesity +
a/f 0 cm, i/v 12 cm never leaking urine 145 cm

operation: anorectum closure and sphincter ani_perineal body reconstruction

duration: 25 min (**step-by-step teaching**) healing 85% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

incision at pvw edge with freshening of sphincter ani ends, minimal sharp dissection with mobilization of pararectal_anal tissue, tension-free longitudinal anorectum closure with adaptation_rhaphy of internal sphincter over 3 cm up to anocutaneous junction (with repositioning of anterior anus) by double layer of inverting interrupted/continuous serafit, inner ring of external sphincter adapted, end-to-end external sphincter ani reconstruction by 2x serafit, perineal body repair with (in)direct re-union of transversus perinei muscles and (in)direct posterior re-union of bulbocavernosus muscles by 3x serafit, perineum well adapted with anus in anatomic position, check on hemostasis foley ch 18; free urine flow, euo/bw 12 cm, good elevation, euo/b 2 cm
if it breakdowns again then **wait 3 mth** before another reconstruction



RR
preanesthesia: 120/70 mm Hg
5': 120/70
10': 120/70
postoperation: 120/70

pt 094

kano mdg
iatrogenic trauma

vvf 4624

b s t b g (kano city)

female

38 yr

28.06.11

surgeon: kees waaldijk

assistant: binta musa

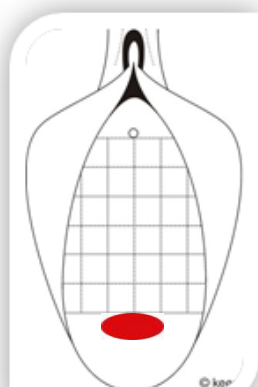
diagnosis: PXII (8 alive), minute < 0.1 cm tah-cs vesicovaginal fistula type I midline within **granulating** 2x1 cm transverse vault defect, **leaking urine for 36 days** which started immediately following tah-cs bco obstructed last labor for 2 days, mmsh sb male, married 25 yr ago pre (menarche 2 mth later), still living with husband, no menstruation, drop foot R (grade 3) and L (grade 4), no rvf, no yankan gishiri, no eclampsia; normal ap diameter/pubic arch 85°, ar pos, vault fixed midline obesity ++
objective stress ++ due to **inflammation** bladder/avw/vault
euo/f 8 cm, f/v 0 cm, i/v 11 cm 160 cm

operation: vvf-repair

duration: 20 min (**step-by-step teaching**) healing 95% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

fistula demonstrated by gv, freshening of **granulating** vault defect, **no** dissection, tension-free transverse vault closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, since avw/pvw adapted and for better healing no further adaptation by sutures, check on hemostasis; free urine flow, euo/bw 11 cm, moderate anterior elevation, euo/b 2.5 cm normal bladder capacity (longitudinal diameter 11-2.5 = 8.5 cm) good position of uv-junction **against** middle third of symphysis normal-width 2.5 cm good-quality urethra_euo in anatomic position



minute < 0.1 cm 0

RR
preanesthesia: 140/80 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

pt 095

kano mdg
infection

vvf 4625

h u i s g (kano city)

female

36 yr

28.06.11

surgeon: kees waaldijk

assistant: binta musa

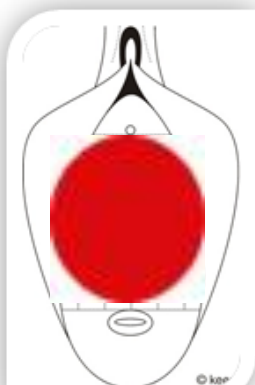
diagnosis: PVI (1 alive), **very extensive** ± 3 cm 0 urethrovesicovaginal fistula type **IIBa** with (sub)total avw loss and 0.2 cm bladder opening, leaking urine for 33 yr which started follow ing boil in vagina (?measles?), married 23 yr ago post(menarche 2 mth earlier), still living with husband, normal menstruation, drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no eclampsia; normal ap dia meter/wide pubic arch 90°, ar pos, cervix fixed, severe vagina shortening
euo/f 0.3 cm, f/c 0.3 cm, i/v 5 cm 153 cm

operation: uvvf-repair as **first stage minimum surgery**

duration: 30 min (**step-by-step teaching**) healing 95% continence 40%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

episiotomy L, incision at fistula edge, **minimal** sharp dissection, tension-free transverse bladder/urethra closure by single layer of inverting serafit with bilateral fixation of pc fascia/anterior cervix onto paraurethra_euo atf, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw/cervix adaptation by 2x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 13 cm, good anterior elevation, euo/b 0.5 cm (**compression**) i/v 4 cm
normal bladder capacity (longitudinal diameter 13-0.5 = 12.5 cm)
poor position of uv-junction **against** caudad third of symphysis
normal-width 0.5 cm medium-quality urethra_euo in anatomic position
it is very well possible for total continence due to physiologic stress



extensive 3 cm 0

RR

preanesthesia: 130/80 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

total circumferential repair

z m j k (kano)

female

22 yr

28.06.11

surgeon: kees waaldijk

assistant: binta musa

diagnosis: PIV (1 alive), \pm 2x1 cm urethrovesicovaginal fistula type **IIBb**, leaking urine for 1 yr which started immediately following cs bco obstructed last labor for 2 days, in hospital (1 day) sb male, married 11 yr ago pre(men arche 1 yr later), still living with new husband, normal menstruation, drop foot R (grade 5) and L (grade 5), rvf **healed**, no yankan gishiri, eclampsia no; ?ap diameter?/normal pubic arch 85°, ar pos, cervix fixed midline, operated vvf/rvf 2x (jos_jan kwano_lengmang), severe vagina shortening, bilateral atf /atl + pc_ilc_iscm loss, lpl stricture
euo/f 0 cm, f/c 2.5 cm, i/v 4 cm 149 cm

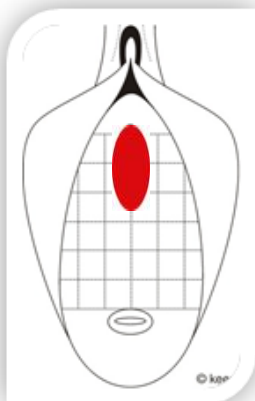
operation: continent urethra/fascia/avw reconstruction

duration: 45 min

healing 85% continence 60%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

re-episiotomy L, wide H incision around fistula, sharp dissection, sharp mobilization of (para)urethra tissue, tension-free longitudinal urethra reconstruction over 2 cm with repositioning of retracted uv-junction by single layer of inverting interrupted serafit, bilateral fixation of pc fascia onto paraurethra_euo atf/symphysis by 2x serafit each side, euo/b 1.7 cm, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, avw reconstruction by avw advancement flap by 4-point fixation onto paraurethra atf/symphysis by everting seralon, check on hemostasis, epi closure, pack; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 1.7 cm
normal bladder capacity (longitudinal diameter 12-1.7 = 10.5 cm)
poor position uv-junction **against** caudad third symphysis
normal-width 1.5 cm poor-quality urethra_euo in anatomic position
the **problem**: **severe scarring/poor-quality paraurethra tissue/total cervix fixation**



2x1 cm longitudinal

RR
preanesthesia: 120/80 mm Hg
5': 120/70
10': 120/70
postoperation: 120/70

pt 097

kano mdg
anterior trauma

vvf 002

u a h b (kano)

female

17 yr

28.06.11

surgeon: dr idris suleiman abubakar

assistant: hafsat ibrahim

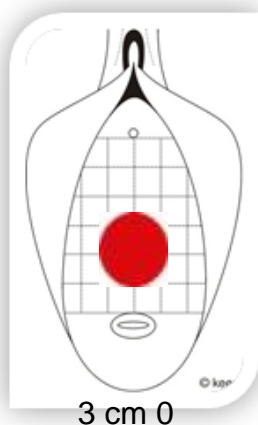
diagnosis: PI (0 alive), \pm 3 cm 0 urethrovesicovaginal fistula type **IIAb, leaking urine for 30 days** which started immediately following obstructed labor for 7 days, in hospital bichi (5 days) sb male, married 4 yr ago pre(menarche 4 mth later), still living with husband, no menstruation, drop foot R (grade 4) and L (grade 5), no rvf, no yankan gishiri, eclampsia yes; normal ap dia meter/**narrow** pubic arch 60°, ar pos, cervix fixed, bilateral atf/atl + pc_iloc _iscm loss, lpl stricture
euo/f 4 cm, f/c 2 cm, i/v 11 cm 141 cm

operation: 4/5 circumferential uvvf-repair + bilateral pcf fixation

duration: 60 min healing 60% continence 90%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

episiotomy R with severing, incision at fistula edge, sharp 4/5 circumferential dissection, tension-free 4/5 circumferential end-to-end vesicourethrostomy by single layer of inverting serafit, bilateral fixation of pc<fascia onto paraurethra_euo atf by 1 serafit each side, **no** urine thru suture line/euo on rest/cough/pressure, ballooning on of foley ch 18, transverse avw/avw_cervix adaptation by 2x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 13 cm, good anterior elevation, euo/b 3 cm normal bladder capacity (longitudinal diameter 13-3 = 10 cm) good position of uv-junction **against** middle third of symphysis normal-width 3 cm good-quality urethra_euo in anatomic position



RR
 preanesthesia: 130/80 mm Hg
 5': 120/70
 10': 120/70
 postoperation: 120/70

pt 098

kano mdg
anterior trauma

vvf 003

h a k g (kano)

female

28 yr

28.06.11

surgeon: dr amir imam

assistant: asmau mado

diagnosis: PIX (3 alive), \pm 1.5 cm 0 vesicovaginal fistula type **I** at midline, **leaking urine for 23 days** which started immediately following obstructed labor for 1 day, at home sb male, married 15 yr ago pre(menarche 3 mth later), still living with husband, no menstruation, no drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no eclampsia; normal ap diameter/pubis arch 85°, ar pos, cervix mobile
euo/f 6 cm, f/c 0 cm, i/v 11 cm 148 cm

operation: vvf-repair

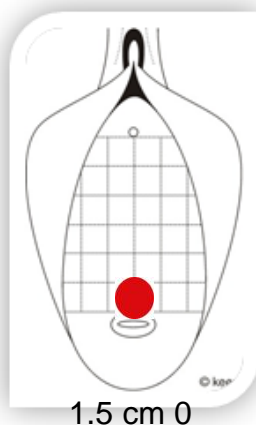
duration: 40 min

healing 90% continence 85%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision thru/at fistula edge, sharp dissection, tension-free transverse bladder/urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw/cervix adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 20 cm, good anterior elevation, euo/b 2.5 cm

increased bladder capacity (longitudinal diameter 20-2.5 = 17.5 cm, **atonic bladder**)
good position of uv-junction **against** middle third of symphysis
normal-width 2.5 cm good-quality urethra_euo in anatomic position



RR

preanesthesia: 130/80 mm Hg
 5': 130/80
 10': 130/80
 postoperation: 130/80

pt 099

kano mdg
anterior trauma

vvf 004

z m j-k (kano)

female

23 yr

28.06.11

surgeon: dr amir imam

assistant: asmau mado

diagnosis: PIV (1 alive), \pm 1 cm 0 urethrovesicovaginal fistula type I at midline, leaking urine for 1 yr which started immediately following cs bco last obstructed labor for 2 days, in hosp (1 day) kazaure sb male, married 11 yr ago pre(menarche 1 yr later), still living with husband, normal menstruation, no drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no eclampsia; normal ap diameter/pubis arch 85°, ar pos, cervix fixed euo/f 5 cm, f/c 0 cm, i/v 11 cm 149 cm

operation: vvf-repair

duration: 60 min

healing 80% continence 90%

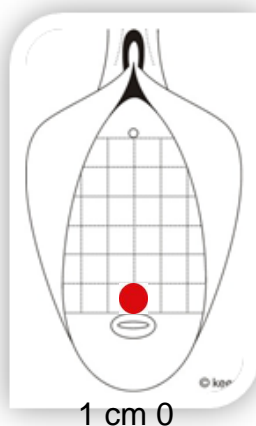
anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

incision at fistula edge, sharp dissection, excision of scar tissue +, tension-free transverse bladder closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw/cervix adaptation by 3x everting seralon, check on hemostasis; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 3 cm

normal bladder capacity (longitudinal diameter 12-3 = 9 cm)

good position of uv-junction **against** middle third of symphysis

normal-width 3 cm good-quality urethra_euo in anatomic position



RR
preanesthesia: 130/80 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

pt 100

kano mdg

vvf 4627

span too wide; posterior trauma

m j k_m (kano)

female

25 yr

29.06.11

surgeon: kees waaldijk

assistant: binta musa

diagnosis: PIV (3 alive), cystocele_3° cervix prolapse_rectocele without genuine stress incontinence, something coming out of vagina_leaking urine for 9 yr which started spontaneously following first labor for 1 day, at home live male, married 10 yr ago post(menarche 2 yr earlier), still living with husband, normal menstruation, no drop foot R (grade 5) and L (grade 5), no vvf/rvf, no yankan gishiri, no eclampsia; normal ap diameter/**wide** pubic arch 95°, ar pos, no decubitus ulcer cervix
euo/c 8 cm **never** leaking urine **narrow** urethra_euo in anat pos
no objective stress incontinence (also not after reduction)
euo/bw 13 cm, poor elevation, euo/b 1.5 cm, i/v 11 cm 149 cm

operation: cervix suspension at L

duration: 15 min (**step-by-step teaching**) healing 95% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

small avw incision avw ruga fold with transverse extension up to cervix, sharp dissection to create wound area/surface, paravesical space free, fixation of cervix (with adherent pc fascia) onto L superior pubic bone/pc_iloc_iom/atf/atl by 2x seralon, euo/b 2.7 cm, **no** urine thru euo on rest/cough/pressure, foley ch 18, check on hemostasis; free clear urine flow, euo/bw 13 cm, good elastic anterior elevation at L, rotational descent at R, euo/b 2.7 cm (**re-urethralization**) good cervix fixation
normal bladder capacity (longitudinal diameter 13-2.7 = 10.5 cm)
good position of uv-junction **against** middle third of symphysis
normal-width 2.5 cm good-quality urethra_euo in anatomic position

RR

preanesthesia: 130/80 mm Hg

5': 120/80

10': 120/70

postoperation: 120/70

pt 101

kano mdg

rvf 760

kano

cath 913

anterior/posterior trauma

a a g (kano city)

female

37 yr

29.06.11

surgeon: kees waaldijk

assistant: binta musa

diagnosis: PIX (all alive), ?small anterior sphincter ani defect?, tusa pv for 11 mth which started immediately following obstructed last labor for 1 day, in hospital mmsh live male, married 25 yr ago pre(menarche 1 yr later), still living with husband, no menstruation, no (h/o) drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/pubis arch 85°, AR pos obesity +++, successful vvf-repair 15.2.10 (mmsh_im) ??sphincter defect 11.30-12.30?? i/v 12 cm 159 cm

operation: sphincter ani_perineal body "reconstruction"

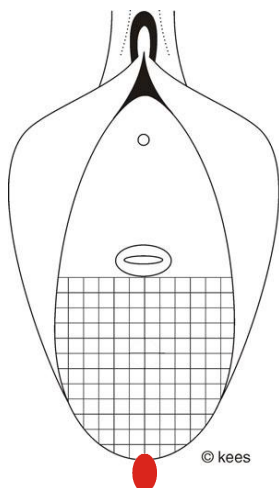
last resort

duration: 15 min

healing 95% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

pat cannot pinpoint where exactly the tusa is coming from
careful inspection of whole pvw bjut no rvf found; there may be small anterior sphincter ani defect but even on palpation only fatty tissue felt
small transverse curved incision at anterior anus, **no** dissection, end-to-end sphincter ani repair by 2x serafit, perineal body closure by 2x serafit, check on hemostasis
the **problem: severe obesity +++ and pat cannot pinpoint her problem**
whatever it is no more operation



RR
preanesthesia: 150/100 mm Hg
5': 140/90
10': 140/90
postoperation: 140/90

pt 102

kano mdg

vvf 4628

anterior trauma; still type IIAa

m m t m (kano)

female

17 yr

29.06.11

surgeon: kees waaldijk

assistant: binta musa

diagnosis: PI (0 alive), \pm 0.6 cm 0 urethrovesicovaginal fistula type **IIAa** within transverse 4x1 cm healed avw trauma/pcf defect, **leaking urine for 31 days** which started immediately following obstructed labor for 3 days few hours at home, in hosp (3 days) minjibir sb male, married 1 yr ago post(menarche 3 yr earlier), not living with husband, no menstruation, drop foot R (grade 3-4) and L (grade 3-4), no rvf, no yankan gishiri, eclampsia yes; normal ap diameter/pubis arch 85°, ar pos, cervix mobile
 euo/f 1 cm, f/c 5 cm, i/v 11 cm 154 cm

operation: uvvf-repair + transverse pcf repair/bilateral fixation **minimum surgery**

duration: 20 min (**step-by-step teaching**) healing 95% continence 85%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

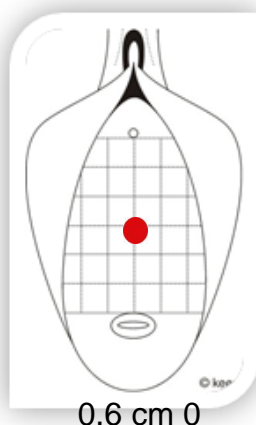
transverse incision thru/at fistula edge, sharp dissection, transverse 4x1 cm pcf defect, tension-free transverse pc fascia repair/bilateral fixation onto paraurethra_euo atf with bladder/urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 0.6 cm

normal bladder capacity (longitudinal diameter 12-0.6 = 11.5 cm)

poor position of uv-junction **against** caudad third of symphysis

normal-width 0.5 cm medium-quality urethra_euo in anatomic position

since good-quality tissue, good fascia plate and minimum invasive surgical trauma good prognosis even for continence; actually i expect total continence after 4-5 mth



RR

preanesthesia: 120/70 mm Hg
 5': 120/70
 10': 120/70
 postoperation: 120/70

pt 103

kano mdg
anterior trauma

vvf 4629

s h s t (kano city)

female

22 yr

29.06.11

surgeon: dr gabari habib/kees waaldijk

assistant: binta musa

diagnosis: PII (1 alive), **retracted** \pm 0.5 cm 0 urethrovesicovaginal fistula type **IIAa** within 4x1 cm pcf defect, **leaking urine for 38 days** which started immediately following obstructed labor for 2 days few hours at home, in mmsh (2 days) sb male, married 3 yr ago post(menarche 6 yr earlier), still living with husband, no menstruation, drop foot R (grade 3) and L (grade 4), no rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/pubis arch 85°, ar pos, cervix mobile, obesity ++
euo/f 2 cm, f/c 3 cm, i/v 12 cm

143 cm

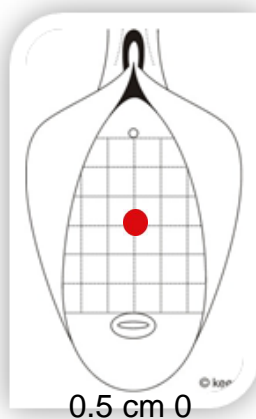
operation: uvvf-repair + transverse pcf repair

duration: 45 min

healing 90% continence 85%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

episiotomy L, transverse incision thru/at fistula edge, sharp dissection, tension-free transverse pc fascia repair with bladder/urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, ballooning of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 11 cm, good anterior elevation, euo/b 2.0 cm
normal bladder capacity (longitudinal diameter 12-2.0 = 10 cm)
acceptable position of uv-junction **against** middle/caudad third of symphysis
normal-width 2 cm good-quality urethra_euo in anatomic position



RR
preanesthesia: 130/80 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

pt 104

kano mdg
anterior trauma

vvf 005

n h a-u (kano)

female

16 yr

29.06.11

surgeon: dr idris suleiman abubakar

assistant: asmau mado

diagnosis: PI (0 alive), \pm 2 cm 0 urethrovesicovaginal fistula type **IIAa** at midline, **leaking urine for 54 days** which started immediately following obstructed labor for 1 day, in hospital mmsh sb male, married 2 yr ago post(menar che 1 yr earlier), not living with husband, no menstruation, drop foot R (grade 4) and L (grade 4), no rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/pubis arch 85°, ar pos, cervix mobile
euo/f 1.5 cm, f/c 4 cm, i/v 11 cm 151 cm

operation: uvvf-repair

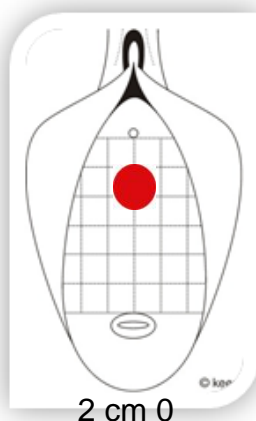
duration: 30 min

healing

continence

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

episiotomy R, transverse incision thru/at fistula edge, sharp dissection, tension-free transverse bladder/urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, ballooning of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 10 cm, good anterior elevation, euo/b 2.5 cm
normal bladder capacity (longitudinal diameter 10-2.5 = 7.5 cm)
good position of uv-junction **against** middle third of symphysis
normal-width 2.5 cm good-quality urethra_euo in anatomic position



	RR
preanesthesia:	120/80 mm Hg
5':	120/70
10':	120/70
postoperation:	120/70

pt 105

kano mdg
anterior trauma

vvf 006

r d b m (borno)

female

28 yr

29.06.11

surgeon: dr idris suleiman abubakar

assistant: asmau mado

diagnosis: PVI (4 alive), **mutilated** ± 2 cm 0 urethrovesicovaginal fistula type **IIa** at R, leaking urine for 1 yr which started immediately following obstructed last labor for 1 day, in hospital biu sb male, married 15 yr ago pre(men arche 3 mth later), still living at husband, normal menstruation, drop foot R (grade 2-3) and L (grade 2-3), no rvf, no yankan gishiri, no eclampsia; normal ap diameter/pubic arch 85°, ar pos, cervix fixed, operated 1x (mai duguri_umth)
euo/f 0.5 cm, f/c 4 cm, i/v 11 cm 155 cm

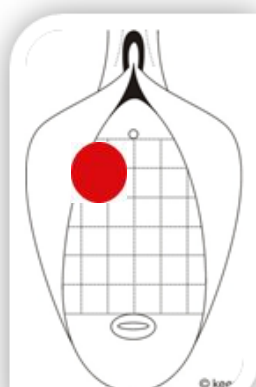
operation: uvvf-repair

duration: 40 min

healing 80% continence 60%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

incision at fistula edge, sharp dissection, tension-free transverse bladder/urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 8 cm, good anterior elevation, euo/b 1.7 cm moderate bladder capacity (longitudinal diameter 8-1.7 = 6.5 cm)
poor position of uv-junction **against** caudad third of symphysis
normal-width 1.5 cm poor-quality urethra_euo in anatomic position



mutilated 2 cm 0

RR
preanesthesia: 170/90 mm Hg
5': 160/90
10': 140/80
postoperation: 130/80

pt 106

kano mdg
anterior trauma

vvf 007

n a m (jigawa)

female

16 yr

29.06.11

surgeon: dr amir imam

assistant: asmau mado

diagnosis: PI (0 alive), **mutilated** ± 0.5 cm 0 urethrovesicovaginal fistula type **IIBa**,
leaking urine for 2 yr which started immediately following obstructed labor
for 10 days, in hospital gumel sb female, married 3 yr ago post(menarche
2 mth earlier), not living with husband, normal menstruation, drop foot R
(grade 4-5) and L (grade 4-5), no rvf, no yankan gishiri, eclampsia yes;
normal ap diame ter/pubic arch 85°, ar pos, cervix mobile, operated 3x
(jahun_said)
euo/f 0.5 cm, f/c 3 cm, i/v 8 cm 157 cm

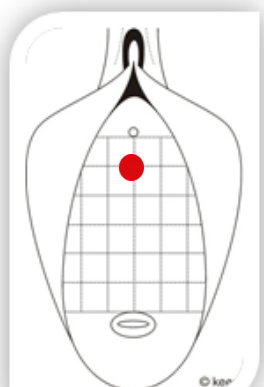
operation: urethra reconstruction

duration: 35 min

healing 80% continence 75%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

excision of scar/mutilation tissue, wide U incision, sharp dissection, tension-free
longitudinal urethra reconstruction over 2 cm by single layer of inverting serafit, **no** urine
thru suture line/euo on rest/cough/pressure, ballooning of foley ch 18, longitudinal avw
adaptation by 3x everting seralon, check on hemostasis free urine flow, euo/bw 12 cm,
good anterior elevation, euo/b 3 cm
normal bladder capacity (longitudinal diameter 12-3 = 9 cm)
good position of uv-junction **against** middle third of symphysis
normal-width 3 cm poor-quality urethra_euo in anatomic position



mutilated 0.5 cm 0

RR
preanesthesia: 140/90 mm Hg
5': 130/80
10': 120/70
postoperation: 120/70

pt 107

kano mdg
anterior trauma

cath 927

g y u-g g (kano city)

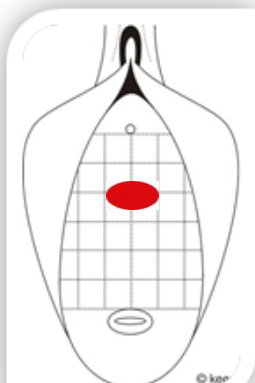
female

16 yr

29.06.11

diagnosis: PI (0 alive), \pm 1.5x1 cm transverse **necrotic** urethrovesicovaginal fistula type **IIAa** midline, **leaking urine for 10 days** which started immediately following obstructed labor for 2 days, in hospital gezawa sb male, married 3 yr ago pre(menarche 3 mth later), not living with husband, no menstruation, drop foot R (grade 3) and L (grade 3), no rvf, no yankan gishiri, eclampsia yes; normal ap diameter/pubis arch 85° , ar pos euo/f 2.5 cm, f/c 3 cm 152 cm

29.06.11 foley ch 18; free urine flow, euo/bw 13 cm, moderate anterior elevation, euo/b 1.5 cm
normal bladder capacity (longitudinal diameter 13-1.5 = 11.5 cm)
poor position of uv-junction **against** caudad third of symphysis
normal-width 1.5 cm good-quality urethra_euo in anatomic position
healing 95% continence 95%



transverse 1.5x1 cm

pt 108

kano mdg

vvf 4630

span too wide; posterior trauma

m s r/k k (kano)

female

27 yr

30.06.11

surgeon: kees waaldijk

assistant: binta musa

diagnosis: PIII (1 alive), cystocele_3° cervix prolapse_rectocele with genuine stress incontinence grade III, something coming out of vagina_leaking urine whilst lying/sitting/standing/walking + spontaneous miction for 16 mth that started immediately following last labor for 1 day, in hospital kabo live female, married 15 yr ago pre(menarche 9 mth later), still living with husband, normal menstruation, no drop foot R (grade 5) and L (grade 5), no vvf/rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/**wide** pubic arch 95°, ar pos, decubitus ulcer cervix
euo/c 9 cm leaking urine **narrow** urethra_euo in anat pos
no objective stress incontinence (also not after reduction)
euo/bw 17 cm, poor elevation, euo/b 1.2 cm 152 cm

operation: cervix suspension at L

duration: 15 min (**step-by-step teaching**) healing 95% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

small avw incision avw ruga fold with transverse extension up to cervix, sharp dissection to create wound area/surface, paravesical space free, fixation of cervix (with adherent pc fascia) onto L superior pubic bone/pc_ilc_iom/atf/atl by 2x seralon, euo/b 2.1 cm, **no** urine thru euo on rest/cough/pressure, foley ch 18, check on hemostasis; free clear urine flow, euo/bw 17 cm, good elastic anterior elevation at L, rotational descent at R, euo/b 2.1 cm (**re-urethralization**) good cervix fixation
increased bladder capacity (longitudinal diameter 17-2.1 = 15 cm)
good position of uv-junction **against** middle third of symphysis
normal-width 2 cm good-quality urethra_euo in anatomic position

RR

preanesthesia: 130/80 mm Hg

5': 130/80

10': 130/80

postoperation: 130/80

pt 109 kano mdg vvf 4631
pt **post IIBb repair; correction of defects** vvf 2483
pt **third obstetric leakage; total circumferential trauma** vvf

a g g (kano city) female 28 yr 30.06.11

surgeon: kees waaldijk

assistant: binta musa

diagnosis: PVI (1alive), post **IIBb** delivery total urine intrinsic_stress incontinence grade III, leaking urine whilst lying/sitting/standing/walking + **no** spontaneous miction for 2 yr which started immediately following obstructed last labor for 2 days, at home sb male, married 15 yr ago post(menarche 2 mth earlier), not living with husband, normal menstruation, no (h/o) drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, eclampsia yes delivery I; normal ap diameter/pubis arch 85°, ar pos, cervix "mobile", **major** atf/atl + pc_io_ilc_iscm loss
euo/c 5 cm cystocele + **open** urethra_euo posteriorly drawn inside euo/bw 12 cm, good elevation, euo/b 0.2 cm, i/v 10 cm 153 cm

operation: urethralization by fascia repair/bilateral fixation

duration: 25 min (**step-by-step teaching**) healing 85% continence 85%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

gv/ no leakage urine level in accord with respiration
transverse incision at 1 cm from euo thru repair scar, sharp dissection, 4x2 cm longitudinal median/L fascia defect from cervix up to 1 cm from euo, longitudinal pc fascia repair by single layer of serafit with normalization of urethra_euo and disappearance of cystocele, bilateral fixation of fascia onto para-euo atf by 1x serafit each side, euo/b now 1.4 cm, **no** urine thru euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw_symphysis/pcf_avw adaptation by 2x everting seralon, check on hemo stasis; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 1.4 cm (**urethralization_compression**)
normal bladder capacity (longitudinal diameter 12-1.4 = 10.5 cm)
poor position of uv-junction **against** caudad third of symphysis
good fascia plate poor-quality_no pcm
normal-width 1.5 cm poor-quality urethra_euo in anatomic position
since functional anatomy reconstructed good chance of continence (physiologic stress)

RR
preanesthesia: 130/80 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

pt 110
pt 111

kano mdg

vvf 4632
rvf 761

total circumferential + iatrogenic trauma

f y b (katsina)

female

22 yr

30.06.11

surgeon: kees waaldijk

assistant: binta musa

diagnosis: PI (0 alive), **mutilated** total post **IIAb** urine intrinsic_stress incontinence grade III, residual **mutilated** \pm 1 cm 0 rectovaginal fistula midline fixed to cervix type **la**, leaking urine whilst lying/sitting/standing/walking + **no** spontaneous miction/passing stools pv for 7 yr that started immediately following obstructed labor for 2 days, in hospital funtua sb male, married 9 yr ago pre(menarche 2 mth later), not living with husband, menstruation thru anus together with stools, drop foot R (grade 4-5) and L (grade 4-5), no yankan gishiri, eclampsia yes; ?ap diameter?/normal pubic arch 85°, ar pos, bilateral atf/atl + pc_ilc_iscm loss, "cervix" fixed midline onto sacrum, operated 4x (b/r_id), severe vagina shortening euo/"c" 4 cm **open** euo/euo/bw 12 cm, euo/f 0.5 cm, ab/au xx cm, a/f 6 cm, i/v 4 cm 154 cm

operation: rvf-"repair"/excision of scar tissue/urethralization/bilateral pcf fixation

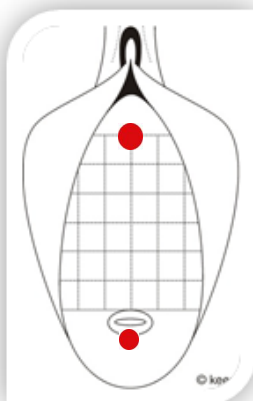
duration: 50 min **last resort** healing **both** 85% continence 60%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

bilateral re-episiotomy, transverse incision thru rvf, minimal sharp dissection, excision of scar tissue, transverse cervix/rectum closure by single layer of inverting serafit

gv: **no** leakage urine level in accord with respiration

transverse incision at 1.5 cm from euo thru repair scar, sharp dissection, excision of scar tissue ++ until "fascia"/bladder, longitudinal "fascia" repair by single layer of inverting serafit, bilateral fixation of "pc fascia" onto para-euo symphysis/atf by 1x serafit each side, no urine thru euo on rest but still ++ on cough, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 1.5 cm normal bladder capacity (longitudinal diameter 12-1.5 = 10.5 cm) poor position of uv-junction **fixed against** caudad third of symphysis normal-width 1.5 cm poor-quality urethra_euo in anatomic position



RR
preanesthesia: 140/90 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

pt 111
pt 110

kano mdg
total circumferential + iatrogenic trauma

rvf 761
vuf 4632

f y b (katsina)

female

22 yr

30.06.11

surgeon: kees waaldijk

assistant: binta musa

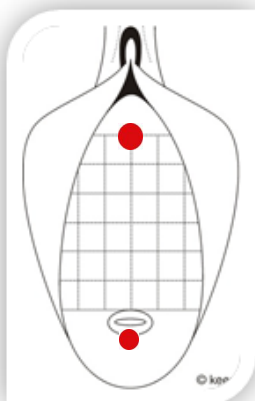
diagnosis: PI (0 alive), **mutilated** total post **IIAb** urine intrinsic_stress incontinence grade III, residual **mutilated** \pm 1 cm 0 rectovaginal fistula midline fixed to cervix type **la**, leaking urine whilst lying/sitting/standing/walking + **no** spontaneous miction/passing stools pv for 7 yr that started immediately following obstructed labor for 2 days, in hospital funtua sb male, married 9 yr ago pre(menarche 2 mth later), not living with husband, menstruation thru anus together with stools, drop foot R (grade 4-5) and L (grade 4-5), no yankan gishiri, eclampsia yes; ?ap diameter?/normal pubic arch 85°, ar pos, bilateral atf/atl + pc_ilc_iscm loss, "cervix" fixed midline onto sacrum, operated 4x (b/r_id), severe vagina shortening euo/"c" 4 cm **open** euo/euo/bw 12 cm, euo/f 0.5 cm, ab/au xx cm, a/f 6 cm, i/v 4 cm 154 cm

operation: rvf-"repair"/excision of scar tissue/urethralization/bilateral pcf fixation

duration: 50 min **last resort** healing **both** 85% continence 60%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

bilateral re-episiotomy, transverse incision thru rvf, minimal sharp dissection, excision of scar tissue, transverse cervix/rectum closure by single layer of inverting serafit
gv: **no** leakage urine level in accord with respiration
transverse incision at 1.5 cm from euo thru repair scar, sharp dissection, excision of scar tissue ++ until "fascia"/bladder, longitudinal "fascia" repair by single layer of inverting serafit, bilateral fixation of "pc fascia" onto para-euo symphysis/atf by 1x serafit each side, no urine thru euo on rest but still ++ on cough, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 1.5 cm normal bladder capacity (longitudinal diameter 12-1.5 = 10.5 cm)
poor position of uv-junction **fixed against** caudad third of symphysis
normal-width 1.5 cm poor-quality urethra_euo in anatomic position



RR
preanesthesia: 140/90 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

pt 112
pt

kano

vvf 4633
vfv 3925
rvf aagbq

total circumferential trauma: second obstetric fistula

b i b (kano city)

female

22 yr

30.06.11

surgeon: kees waaldijk

assistant: binta musa

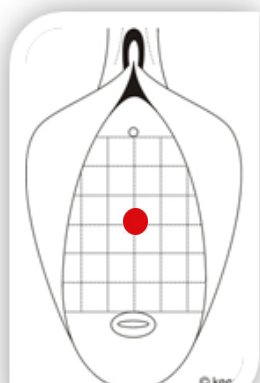
diagnosis: PII (0 alive), severe uv-stricture and minute < 0.1 cm urethrovaginal fistula type **IIAb** slightly at L (0.3 cm 0 bladder_urethra defect) within transverse 5x1 cm pcf defect, leaking urine for 2 yr that started immediately following obstructed last labor for 2 days, in hospital tiga sb female, married 4.5 yr ago post (menarche 3 yr earlier), still living with husband, normal menstruation, drop foot R (grade 5) and L (grade 5), healed proximal midline 2 cm 0 pvw_cervix trauma, no rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/pubis arch 90°, ar pos, bilateral atf/atl + pc_ilcm loss euo/f 1.5 cm, f/c 4 cm, i/v 11 cm cervix mobile 155.0 cm

operation: dilatation, uvvf-repair and bilateral pcf fixation

duration: 15 min healing 95% continence 85%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

gentle gradual dilatation from H3 thru H10, fistula demonstrated by gv, transverse incision thru fistula/previous repair scar, sharp dissection, tension-free transverse pc fascia repair/bilateral re-fixation onto paraurethra_euo atf with bladder/urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 13 cm, good anterior elevation, euo/b 1.6 cm normal bladder capacity (longitudinal diameter 13-1.6 = 11.5 cm) poor position of uv-junction **against** caudad third of symphysis normal-width 1.5 cm medium-quality urethra_euo in anatomic position



minute < 0.1 cm 0

RR
preanesthesia: 120/70 mm Hg
5': 120/70
10': 120/70
postoperation: 120/70

pt 113

kano mdg

vvf 008

vvf 3961

rvf aagcb

z s d (kano city)

female

45 yr

30.06.11

surgeon: dr amir imam

assistant: asmau mado

diagnosis: PXI (7 alve), residual \pm 1 cm 0 urethrovesicovaginal fistula midline following **complicated** uvvf-repair 8.10.07, still living with husband, no menstruation, no (h/o) drop foot R (grade 5) and L (grade 5), no yankan gishiri; normal AP dia meter/pubic arch 85°, AR pos, pc_ilcm loss due to repair 1x (nasarawa hosp_im) whereby L ureter picked up by sutures, cervix fixed/retracted very high up against sacrum, obesity ++
 euo/f 2 cm, f/c 2 cm, i/v 14 cm 166.0 cm

operation: uvvf-repair

duration: 30 min

healing 90% continence 80%

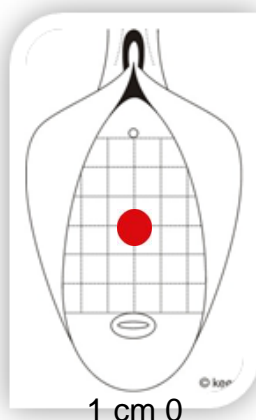
anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

incision at fistula edge, sharp dissection, tension-free transverse bladder/urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon and check on hemostasis; free urine flow, euo/bw 15 cm, good anterior elevation, euo/b 2.0 cm

normal bladder capacity (longitudinal diameter 15-2 = 13 cm)

acceptable position of uv-junction **against** middle/caudad third of symphysis

normal-width 2 cm good-quality urethra_euo in anatomic position



	RR
preanesthesia:	150/100 mm Hg
5':	140/90
10':	130/80
postoperation:	130/80

pt 114
pt

kano mdg
extensive obstetric trauma; new leakage

vvf 009

vvf 4165
rvf 679

h a w (kano city)

female

22 yr

30.06.11

surgeon: dr idris suleiman abubakar

assistant: yusuf abdullahi dannafada

diagnosis: PII (0 alive), total post **extensive IIAb** urine intrinsic-stress incontinence grade III, leaking urine whilst lying/sitting/standing/walking + **no** spontaneous miction for 6 mth which started after period of lower abdominal pain/fever (?miscarriage?), still living with husband, normal menstruation, drop foot R (grade 5) and L (grade 5), no yankan gishiri; normal AP diameter/pubis arch 85°, AR pos, **major** pc_ilcm + total atf/atl loss, **?what happened since completely ok 1 yr after repair?** **rvf healed**
euo/bw 16 cm, good elevation, euo/b 0.5 cm, euo/c 1 cm, i/v 9 cm

operation: elevation of bladder neck

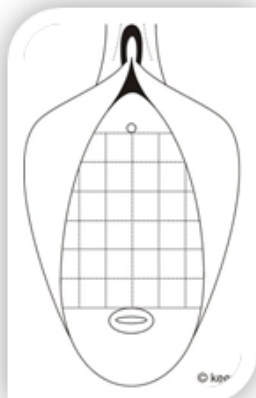
152.0 cm

duration: 20 min

healing 85% continence 60%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

bilateral paraurethra longitudinal incision, bilateral fixation of "pc fascia" onto para-euo atf by 1x serafit each side, **no** urine thru euo on rest/cough/pressure, ballooning of foley ch 18, longitudinal avw adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 16 cm, good anterior elevation, euo/b 2.1 cm
normal bladder capacity (longitudinal diameter 16-2.1 = 14 cm)
good position of uv-junction **fixed against** middle third of symphysis
normal-width 0.5 cm poor-quality urethra_euo in anatomic position



RR
preanesthesia: 130/80 mm Hg
5': 120/70
10': 120/70
postoperation: 120/70

pt 115

kano mdg

vvf 010

vvf 3940

very extensive inoperable second obstetric fistula type IIAb

r i s (kano city)

female

34 yr

30.06.11

surgeon: dr idris suleiman abubakar

assistant: nadabu mohammed shitu

diagnosis: PVI (3 alive), residual 0.5 cm 0 lungu fistula R following **proximal pouch** 24.9.07, still living with husband, no menstruation, drop foot R (grade 3) and L (grade 5), no RVF, no yankan gishiri; normal AP diameter/pubis arch 90°, AR pos, **extensive** bilateral pc_iloc_iscm + ATF/AL loss from para urethra up to ischiac spine, ssl loss, cervix remnants fixed/retracted at tip of proximal "vagina" in **empty pelvis with all "remaining" tissue fixed** successful repair delivery I (mmsh_sa) 15 yr ago
 extensive explanation given to patient before repair was started
 euo/f 2 cm, f/v 1 cm, i/v 8 cm 150.0 cm

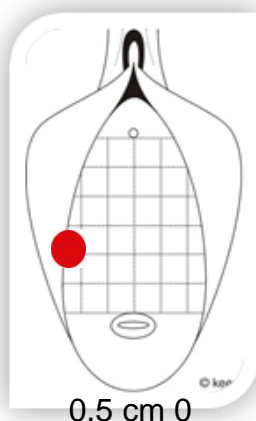
operation: uvvf-repair

duration: 30 min

healing 60% continence 30%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision thru fistula/repair scar, sharp dissection, abdomen opened, tension-free transverse bladder/urethra closure by single layer of inverting serafit, bilateral fixation of bladder onto symphysis, **no** urine thru suture line/euo on rest but **±** on cough, ballooning of foley ch 18, transverse avw adaptation by 3x everting seralon, check on hemostasis; free urine flow, euo/bw 13 cm, good anterior elevation, euo/b 2.5 cm normal bladder capacity (longitudinal diameter 13-2.5 = 10.5 cm)
 good position of uv-junction **against** middle third of symphysis
 normal-width 2.5 cm good-quality urethra_euo in anatomic position



RR
 preanesthesia: 140/90 mm Hg
 5': 130/80
 10': 130/80
 postoperation: 130/80

pt 116
pt

kano mdg
total circumferential trauma

vvf 011

vvf 803
rvf 108

h t g (kano)

female

33 yr

30.06.11

surgeon: dr amir imam

assistant: nafada

diagnosis: PI, now **new** ± 0.5 cm 0 urethrovesicovaginal fistula **IIAb** after elevation for post repair intrinsic incontinence 3.9.08 (mmsh_im) after successful repair 6.6.94, still living with husband, normal menstruation, drop foot R (grade 5) and L (grade 5); severe vagina stenosis/moderate shortening; normal ap diameter/narrow pubic angle 75° ; rvf **healed**
euo/f 1 cm, f/c 2 cm, i/v 8 cm 155.0 cm

operation: uvvf-repair

duration: 35 min healing 85% continence 90%

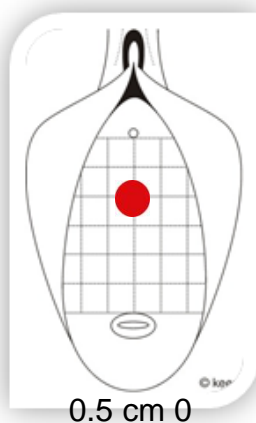
anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

incision at fistula edge, sharp dissection, tension-free longitudinal bladder_urethra closure with bladder neck raphy by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, ballooning of foley ch 18, longitudinal avw adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 15 cm, good anterior elevation, euo/b 3 cm

normal bladder capacity (longitudinal diameter $15-3 = 12$ cm)

good position of uv-junction **against** middle third of symphysis

normal-width 3 cm medium-quality urethra_euo in anatomic position



RR
preanesthesia: 130/80 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

pt 117
pt 118

kano mdg
anterior trauma/posterior cut-thru

vvf 4634
rvf 762

k m d (kano city) female 15 yr 01.07.11

surgeon: kees waaldijk

assistant: binta musa

diagnosis: PI (alive), \pm 1 cm 0 urethrovesicovaginal fistula type **IIAa** midline, **mutilated** sphincter ani rupture with 2.5 cm longitudinal anaorectum trauma type **IIb**, **leaking urine/stool/flatus incontinence for 13 days** which started immediately following obstructed labor for 3 days, in hospital live male, married 1 yr ago post(menarche 1 yr earlier), not living with husband, no menstruation, drop foot R (grade 3-4) and L (grade 3-4), no yankan gish iri, no h/o eclampsia; normal ap diameter/**wide** pubic arch 95°, ar pos, cervix mobile, immediate suturing pp
euo/f 2 cm, f/c 3 cm, a/f 0 cm, i/v 12 cm 154 cm

operation: uvvf-repair, anorectum closure, sphincter ani/perineal body reconstruction

duration: 50 min (**step-by-step teaching**) healing **both** 95% continence **both** 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

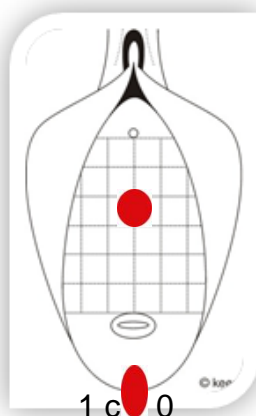
transverse incision thru/at fistula edge, sharp dissection, tension-free transverse bladder/urethra closure with fascia repair by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon; free urine flow, euo/bw 14 cm, good anterior elevation, euo/b 1.6 cm

normal bladder capacity (longitudinal diameter 14-1.6 = 12.5 cm)

poor position of uv-junction **against** caudad third of symphysis

normal-width 1.5 cm good-quality urethra_euo in anatomic position

incision at pvw edge, minimal sharp dissection, tension-free longitudinal anorectum closure with internal sphincter repair up to anocutaneous junction over 3 cm by double layer of inverting interrupted/continuous serafit, inner ring of external sphincter adapted, end-to-end sphincter ani reconstruction by 2x serafit, since **inflammation/contamination ++** only paraanal perineal body adaptation with (in)direct re-union of bulbocavernosa and transversus perinei muscles by 2x serafit, perineum "adapted" (completely when legs put together) check on hemostasis



RR
preanesthesia: 120/70 mm Hg
5': 120/70
10': 120/70
postoperation: 120/70

pt 118
pt 117

kano mdg
anterior trauma/posterior cut-thru

rvf 762
vuf 4634

k m d (kano city) female 15 yr 01.07.11

surgeon: kees waaldijk

assistant: binta musa

diagnosis: PI (alive), \pm 1 cm 0 urethrovesicovaginal fistula type **IIAa** midline, **mutilated** sphincter ani rupture with 2.5 cm longitudinal anaorectum trauma type **IIb**, **leaking urine/stool/flatus incontinence for 13 days** which started immediately following obstructed labor for 3 days, in hospital live male, married 1 yr ago post(menarche 1 yr earlier), not living with husband, no menstruation, drop foot R (grade 3-4) and L (grade 3-4), no yankan gish iri, no h/o eclampsia; normal ap diameter/**wide** pubic arch 95°, ar pos, cervix mobile, immediate suturing pp
euo/f 2 cm, f/c 3 cm, a/f 0 cm, i/v 12 cm 154 cm

operation: uvvf-repair, anorectum closure, sphincter ani/perineal body reconstruction

duration: 50 min (**step-by-step teaching**) healing **both** 95% continence **both** 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

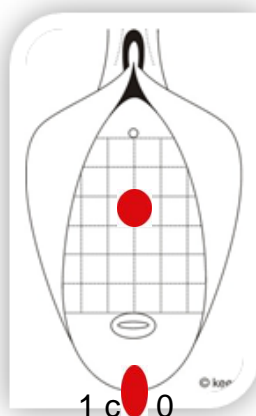
transverse incision thru/at fistula edge, sharp dissection, tension-free transverse bladder/urethra closure with fascia repair by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon; free urine flow, euo/bw 14 cm, good anterior elevation, euo/b 1.6 cm

normal bladder capacity (longitudinal diameter 14-1.6 = 12.5 cm)

poor position of uv-junction **against** caudad third of symphysis

normal-width 1.5 cm good-quality urethra_euo in anatomic position

incision at pvw edge, minimal sharp dissection, tension-free longitudinal anorectum closure with internal sphincter repair up to anocutaneous junction over 3 cm by double layer of inverting interrupted/continuous serafit, inner ring of external sphincter adapted, end-to-end sphincter ani reconstruction by 2x serafit, since **inflammation/contamination ++** only paraanal perineal body adaptation with (in)direct re-union of bulbocavernosus and transversus perinei muscles by 2x serafit, perineum "adapted" (completely when legs put together) check on hemostasis



RR
preanesthesia: 120/70 mm Hg
5': 120/70
10': 120/70
postoperation: 120/70

pt 119

kano mdg
anterior/posterior trauma

vvf 012
rvf

s m g (kano city)

female

16 yr

01.07.11

surgeon: dr idris suleiman abubakar

assistant: nadabi mohammed shitu

diagnosis: PI (0 alive), \pm 1 cm 0 urethrovesicovaginal fistula type **IIAa** within 3x1 cm transverse avw trauma/pcf defect, **leaking urine for 54 days** that started immediately following obstructed labor for 4 days, in hosp (3 days) sanusi sb male, married 1 yr ago post(menarche 2 yr earlier), not living with husband, no menstruation, drop foot R (grade 4) and L (grade 3), no rvf, no yankan gishiri, eclampsia yes; normal ap diameter/pubis arch 85°, ar **neg**, no saddle anesthesia, **flatus** incontinence, cervix mobile
euo/f 4 cm, f/c 2 cm, i/v 13 cm 149 cm

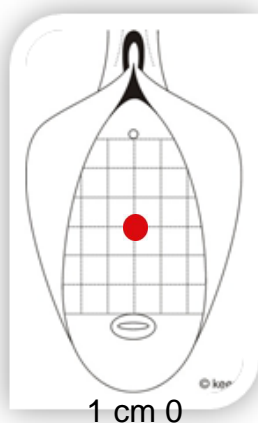
operation: uvvf-repair + transverse fascia repair

duration: 30 min

healing 90% continence 90%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision thru/at fistula edge, sharp dissection, tension-free transverse bladder/urethra closure with transverse fascia repair by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, ballooning of foley ch 18, transverse avw adaptation by 3x everting seralon, check on hemostasis; free urine flow, euo/bw 16 cm, good anterior elevation, euo/b 4 cm
normal bladder capacity (longitudinal diameter 16-4 = 12 cm)
good position of uv-junction **against** middle third of symphysis (whole urethra fixed)
normal-width 4 cm good-quality urethra_euo in anatomic position



RR
preanesthesia: 120/70 mm Hg
5': 120/70
10': 120/70
postoperation: 120/70

pt 120

kano mdg
anterior trauma

vvf 013

a m u/m f (katsina)

female

43 yr

01.07.11

surgeon: dr amir imam

assistant: binta waziri

diagnosis: PII (1 alive), \pm 1 cm 0 urethrovesicovaginal fistula type **IIAa** at midline, leaking urine for 20 yr which started immediately following obstructed last labor for 2 days, in hospital abuth zaria sb female, married 30 yr ago pre (menarche 3 mth later), still living with husband, normal menstruation, bilateral drop foot for 1 mth R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no h/0 eclampsia; normal ap diameter/pubis arch 85°, ar pos, cervix fixed midline, operated 1x (zaria-abuth)
euo/f 2 cm, f/c 3 cm, i/v 8 cm 149 cm

operation: uvvf-repair

duration: 30 min

healing 80% continence 80%

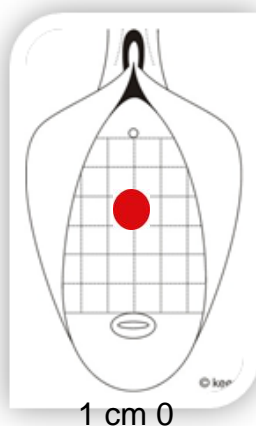
anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

incision at fistula edge, sharp dissection, tension-free longitudinal bladder_urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, longitudinal avw adaptation by 2x everting seralon, check on hemostasise; free urine flow, euo/bw 11 cm, good anterior elevation, euo/b 2 cm

normal bladder capacity (longitudinal diameter 11-2 = 9 cm)

acceptable position of uv-junction **against** middle/caudad third of symphysis

normal-width 2 cm medium-quality urethra_euo in anatomic position



	RR
preanesthesia:	150/90 mm Hg
5':	140/90
10':	130/80
postoperation:	130/80

pt 121

katsina mdg
anterior/posterior trauma

cath 1361
rvf

h i b (katsina)

female

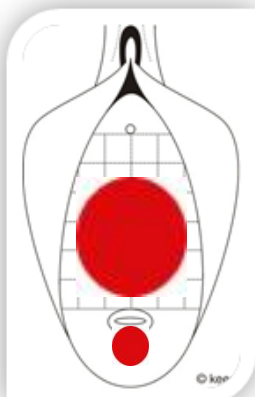
16 yr

28.06.11

diagnosis: PII (1 alive), \pm 4 cm 0 **black-necrotic** urethrovesicovaginal fistula type **IIA**, \pm 2 cm 0 proximal **black-necrotic** "rectovaginal fistula" type **la** midline **leaking urine/not passing stools pv for 6 days** which started immediately following obstructed labor for 2 days, in hospital sb male, married 3 yr ago pre(menarche 2 mth later), not living with husband, no menstruation, drop foot R (grade 5) and L (grade 4), no yankan gishiri, eclampsia no; normal ap diameter/pubis arch 85°, ar pos
 euo/f 1.5 cm, f/c 1 cm, a/f 8 cm, f/c 0 cm 151.0 cm
 no extensive examination possible

28.06.11 suprapubic mass, avw bulging into vagina, bladder overdistended (euo/bw 22 cm), poor anterior elevation after draining > 1,500 ml urine, euo/b 1.5 cm foley ch 18; free urine flow, **increased** bladder capacity (longitudinal diameter 22-1.5 = 20.5 cm, **an atonic bladder**)
 poor position of uv-junction **against** middle third of symphysis
 normal-width 1.5 cm good-quality urethra_euo in anatomic position
 probably it will heal since necrosis does not seem to be deep

03.07.11 not leaking at all documentation



necrotic 4 cm 0

pt 122

katsina mdg
anterior/posterior trauma

cath 1362
rvf

b a f (katsina)

female

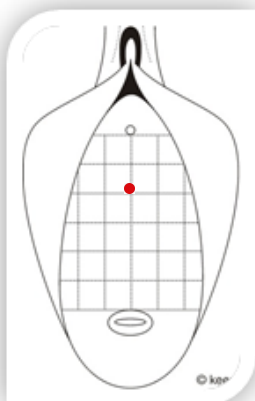
19 yr

28.06.11

diagnosis: PIII (1 alive), \pm 0.1 cm 0 urethrovesicovaginal fistula type **IIAa** midline within **healing** 4x0.5 cm transverse avw/"fascia" trauma, anterior sphincter ani trauma with no perineum, **leaking urine/flatus incontinence for 60 days (2 mth)** which started immediately following obstructed last labor for 1 days, in hospital sb male, married 6 yr ago post(menarche 3 mth earlier), not living with husband, no menstruation, drop foot R (grade 4) and L (grade 4), no yankan gishiri, no h/o eclampsia; normal ap diameter/**wide** pubic arch 90°, ar pos
euo/f 2 cm, f/c 4 cm, a/f 0 cm 157.0 cm

28.06.11 foley ch 18; free urine flow, euo/bw 16 cm, good anterior elevation and euo/b 2 cm
increased bladder capacity (longitudinal diameter 16-2 = 14 cm, **atonic bladder in healing phase**)
acceptable position uv-junction **against** middle/caudad third symphysis
normal-width 2 cm good-quality urethra_euo in anatomic position

02.07.11 not leaking at all



0.1 cm 0
transverse 4x1 cm trauma

total circumferential trauma

b d d (katsina)

female

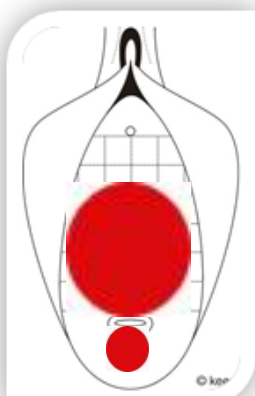
15 yr

29.06.11

diagnosis: PI (0 alive), extensive \pm 5 cm 0 **necrotic** urethrovesicovaginal fistula type **IIAb**, \pm 3 cm 0 **necrotic** proximal pvw, **leaking urine/stool incontinence for 12 days** which started immediately following obstructed labor for 5 days, in hospital sb male, married 1.5 yr ago post(menarche 3 mth ear lier), not living with husband, no menstruation, drop foot R (grade 3-4) and L (grade 3-4), rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/pubic arch 85°, ar pos, total broken down wide episiotomy L with **visible stool incontinence**
 euo/f 1.5 cm, f/c 0 cm, a/f 6 cm 154.0 cm

29.06.11 foley ch 18; free urine flow, euo/bw 14 cm, moderate anterior elevation, euo/b 2 cm
 normal bladder capacity (longitudinal diameter 14-2 = 12 cm)
 acceptable position uv-junction **against** middle/caudad third symphysis
 normal-width 2 cm medium-quality urethra_euo in anatomic position
 probably it will **not** heal since deep necrosis

03.07.11 leaking insp/ balloon in fistula documentation cath removed



extensive 5 cm 0

pt 124

katsina mdg
iatrogenic; yankan gishiri

cath 1364

a a b (katsina)

female

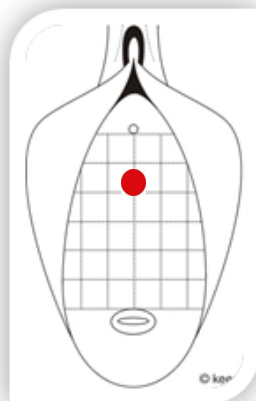
13 yr

30.06.11

diagnosis: P0, **scarred** \pm 0.5 cm 0 urethrovesicovaginal fistula type **IIAa** at midline, **leaking urine for 21 days** that started immediately following yankan gishiri by wanzami bco not sleeping with husband, native medicine, married 3 mth ago pre(menarche not yet), not living with husband, no rvf; normal ap dia meter/pubis arch 85°, ar pos, breast development +, hymen intact **lying/2 more persons/aska/no tissue removed (tomy)**
euo/f 1.5 cm, f/c 4 cm 143.0 cm

30.06.11 foley ch 18; free urine flow, euo/bw 12 cm, good anterior elevation and euo/b 1.5 cm
normal bladder capacity (longitudinal diameter 12-1.5 = 10.5 cm)
acceptable position uv-junction **against** middle/caudad third symphysis
normal-width 1.5 cm good-quality urethra_euo in anatomic position

02.07.11 not leaking at all



0.5 cm 0

pt 125

katsina mdg
?infection?

cath aanad

n b k (katsina)

female

13 yr

02.07.11

diagnosis: P0, urge incontinence **+++**, leaking urine (pat: only at night; never during daytime) + normal miction for 7 yr which started following period of high fever/lower abdominal pain, married 6 mth ago pre(menarche 2 mth later), not living with husband, normal menstruation; normal ap diameter/pubis arch 85°, ar pos
no visible avw trauma 157.0 cm

02.07.11 during inspection only urine **+++** thru euo without any provocation

first bladder drill for 2-4 wk before further examination/decision

pt 126

katsina mdg

vvf 8112

severe iatrogenic mutilation

a b d sokoto city

female

36 yr

02.07.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PVIII (4 alive), **severely mutilated** ± 4 cm 0 urethrovesicovaginal fistula type **IIAa** with bladder base prolapse, leaking urine for 5 mth that started immediately following vaginal hysterectomy (sokoto_priv clin) bco total 3° cervix prolapse for 3 yr following last labor for < 1 day, at home live female, married 24 yr ago pre(menarche 1 yr later), not living with husband, no menstruation, drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no eclampsia; normal ap diameter/**wide** pubic arch 96°, ar pos euo/f 2 cm, f/v 0 cm, i/v 5 cm 150.5 cm

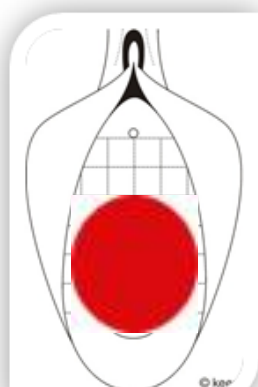
operation: **primary suturing as minimum surgery**

duration: 25 min

healing 75% continence 85%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

difficult reduction of bladder base prolapse, episiotomy L, incision at fistula edge, **no** dissection, tension-free transverse avw/pvw adaptation by 4x everting seralon, still urine ++ thru suture line on flushing with water, triple fixation of foley ch 18 with transverse midline avw adaptation, check on hemostasis, skin closure; free urine flow, euo/bw 11 cm, good anterior elevation, euo/b 1.3 cm **principles of septic/minimum surgery** normal bladder capacity (longitudinal diameter 11-1.3 = 9.5 cm) poor position of uv-junction **against** caudad third of symphysis normal-width 1.5 cm good-quality urethra_euo in anatomic position



mutilated 4 cm 0

	RR
preanesthesia:	150/100 mm Hg
5':	150/90
10':	140/80
postoperation:	130/80

pt 127

katsina mdg

vvf 8113

**major total circumferential trauma
inoperable now; wait 6-8 mth**

rvf

h s b (katsina)

female

15 yr

02.07.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PI (0 alive), **extensive** ± 6 cm 0 urethrovesicovaginal fistula type **IIAb** with circumferential defect, **leaking urine of 71 days** that started immediately following obstructed labor for 2 days, in hospital sb male, married 3 yr ago (menarche 1.5 yr later), not living at husband, no menstruation, drop foot R (grade 4) and L (grade 4), **healed scarred** proximal pvw at cervix (stools pv for 3 wk), no rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/pubis arch 85°, ar pos, **major** bilateral atf/atl + pc_io_ilc_iscm loss, cervix fixed midline/flush with pvw, fibrosesd scarred pvw at L, loss of obturator membrane with "open" obturator foramen at L
euo/f 2 cm, f/c 0 cm, ab/au 1 cm, i/v 9 cm 158.0 cm

operation: **assessment: inoperable now but probably operable after 6-8 mth**

duration: 10 min

healing

continence

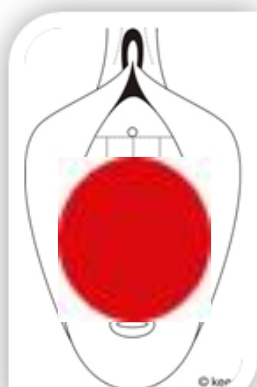
anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

episiotomy L with severing of stenosis

cervix/bladder completely fixed with subtotal avw loss, **good** bladder capacity, cervix/posterior bladder wall flush with fibrosed/scarred pvw RE/ **no** rectum stricture

not advisable now to mobilize bladder etc

wait 6 mth to 1 yr then for review and possible operation



extensive 6 cm 0

RR
preanesthesia: 110/70 mm Hg
5': 110/70
10': 110/70
postoperation: 110/70

pt 128

katsina mdg

vvf 8114

anterior/iatrogenic trauma; second obstetric fistula

e r l (kogi)

female

43 yr

02.07.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PIII (1 alive), \pm 1.5 cm 0 tah-cs-vesicovaginal fistula type I midline, leaking urine for 12 yr which started immediately following tah-cs bco obstructed last labor for 1 day, sb male, married 27 yr ago post(menarche 3 yr earlier), still living with husband, no menstruation since, drop foot R (grade 4-5) and L (grade 3), no rvf, no circumcision/yankan gishiri, no h/o eclampsia; normal ap diameter/pubic arch 85°, ar pos, cervix remnants fixed midline, successful vvf-repair (mmsh) 15 yr ago, euo/f 5 cm, f" c" cm, i/v 11 cm **severe obesity ++++** 154.0 cm

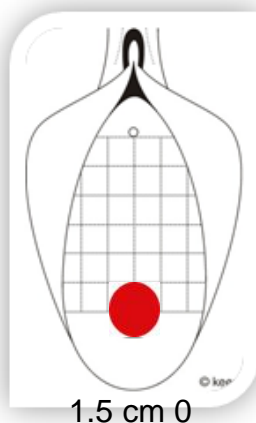
operation: **complicated** tah-cs-vvf-repair

duration: 30 min

healing 75% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

episiotomy L, incision at fistula edge/around posterior cervix remnants, sharp dissection, tension-free transverse bladder/post cervix remnants/pvw "closure" by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, avw/pvw adapted, check on hemostasis, epi closure; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 3.8 cm (whole urethra against symphysis) normal bladder capacity (longitudinal diameter 12-3.8 = 8 cm) good position of uv-junction **against** middle third of symphysis normal-width 4 cm good-quality urethra_euo in anatomic position



RR
 preanesthesia: 170/110 mm Hg
 5': 160/100
 10': 150/90
 postoperation: 140/80

pt 129
pt

katsina mdg

vvf 8115/7663
rvf 968

h si m (katsina)

female

18 yr

02.07.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PI (0 alive), total post **IIBb** urine intrinsic-stress incontinence grade III, leaking urine whilst lying/sitting/standing/walking + no spontaneous micturition following continent urethra/fascia/avw "reconstruction" + rvf-repair 3.7.09, rvf **healed**, not living with husband, normal menstruation, bilateral drop foot for 2 mth R (grade 5) and L (grade 5), no yankan gishiri, no eclapmsia; normal AP diameter **wide** pubic arch 90°, AR pos, bilateral atf/atl + pc_ilc_iscm loss, operated vvf/rvf 5.4.09 (b/r_id), euo pulled inside over 0.5 cm, severe vagina stenosis/shortening subtotal avw loss euo/c 1 cm, euo/b 0.3 cm, i/v 3 cm 152.5 cm

operation: distal urethra_euo **minimum surgery**

last resort final

duration: 20 min

healing 85% continence 60%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

wide H incision around euo, sharp dissection, sharp mobilization of (para)urethra tissue, tension-free longitudinal urethra reconstruction over 1.5 cm by single layer of inverting interrupted serafit, euo/b 1.9 cm, **no** urine thru euo on rest/cough/pressure, triple fixation of foley ch 18, avw reconstruction by avw/cervix advancement flap by 2-point para urethra fixation onto symphysis by everting seralon; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 1.9 cm

normal bladder capacity (longitudinal diameter 12-1.9 = 10 cm)

acceptable position UV-junction **against** middle/caudad third symphysis

normal-width 2 cm poor-quality "**scarred**" urethra_euo in anatomic position

RR

preanesthesia: 130/80 mm Hg

5': 120/80

10': 120/70

postoperation: 120/70

pt 130
pt

katsina mdg
"inoperable IIBb urine fistula"
extensive obstetric trauma

rvf 1027/956/973
vfv 7648

I l d g (zamfara) female 16 yr 02.07.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PI (0 alive), sigmoidostomy, rvf **healed** after repair 25.6.09 to 22.07.09, moderate 2.5 cm 0 scarred rectum stricture, **extensive inoperable IIBb** fistula, not living with husband, no menstruation, drop foot R (grade 3) with gm_at contracture and L (grade 3-4), no yankan gishiri; normal ap diameter/borderline pubic arch 80°, ar pos, major bilateral atf/atl + pc_io_ ilc_iscm loss + ssl_pm trauma, fixed "cervix" shield i/v 8 cm 134.0 cm

operation: sigmoidostomy closure

duration: 20 min healing 85%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

RE/ rvf **healed**, blunt disruption of stricture
transverse incision thru/at sigmoidostomy edge, sharp dissection, excision of scar tissue
+, tension-free transverse sigmoid closure by double layer of inverting interrupted/continuous serafit, transverse skin_fascia adaptation by 1x everting serafit

RR
preanesthesia: 120/70 mm Hg
5': 120/70
10': 120/70
postoperation: 120/70

iatrogenic trauma; see vuf 8112
wanzami is even better than doctor

h i g b (rép niger)

female

20 yr

03.07.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PIII (all alive), \pm 4 cm 0 urethrovesicovaginal fistula type **IIAa** with bladder base prolapse, **leaking urine for 21 days** that started immediately following yankan gishiri by wanzami bco total 3° cervix prolapse, native medicine; **lying/mother/aska/tissue removed (-ectomy)**

18.05.11 total 3° cervix prolapse for 5 yr that started spontaneously following first labor for 1 day, at home live female, married 7 yr ago post(menarche 1 mth earlier), still living with husband, normal menstruation, drop foot R (grade 5) and L (grade 5), no rvf, no eclampsia; normal ap diameter/**wide** pubic arch 95°, ar pos, cervix mobile
 euo/f 2 cm, f/c 0 cm, at op end i/v 10 cm 156.5 cm

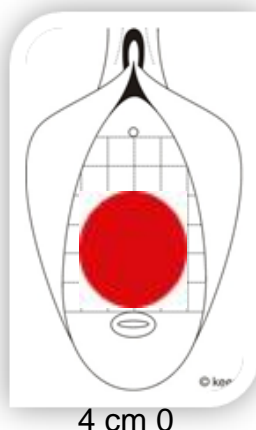
operation: **state-of-the-art** bilateral ureter catheterization + uvvf-repair

duration: 15 min

healing 95% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

bilateral ureter catheterization R/L for 10/20 cm, incision at fistula edge, sharp dissection, tension-free transverse bladder/urethra closure with transverse fascia repair by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw/cervix adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 2.2 cm normal bladder capacity (longitudinal diameter 12-2.2 = 10 cm) euo/c 2 cm
 good position of uv-junction **against** middle third of symphysis
 normal-width 2 cm good-quality urethra_euo in anatomic position



RR
 preanesthesia: 130/80 mm Hg
 5': 120/70
 10': 120/70
 postoperation: 120/70

pt 132

katsina mdg

vvf 8117

pt

sokoto

vvf 181/667

pt

total circumferential trauma

rvf 26

repair of perineal body for better configuration of both continence mechanisms

i b b (sokoto)

female

28 yr

03.07.11

surgeon: kees waaldijk

see vvf-kano 4636

assistant: kabir lawal

obesity ++ 2° cervix prolapse

diagnosis: PI, total post **IIBb** urine intrinsic_stress incontinence grade III, leaking urine whilst lying/sitting/standing/walking + **no** spontaneous miction after multiple repair + urethra reconstruction 5.2.98 to 22.5.03, leaking urine for 14 yr which started immediately following obstructed labor for 4 days, in hospital sb female, married 16 yr ago pre(menarche 1 yr later), still living with husband, normal menstruation, drop foot R (grade 4-5) and L (grade 5), no yankan gishiri, eclampsia yes; normal ap diameter/wide pubic arch 90°, bilateral **major** atf/atl + pc_io_ilc_iscm loss, **no** perineal body, operated later 2x (abba_wara) **wide open** urethra_euo rvf **healed** euo/c 2 cm euo/bw 12 cm, moderate elevation, euo/b 0.5 cm, i/v 4 cm 156 cm

operation: continent urethralization/fascia/avw reconstruction + perineal body repair

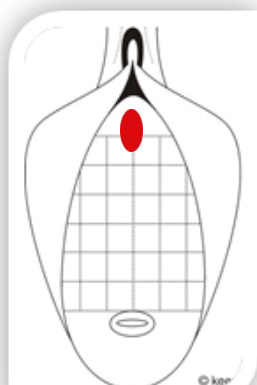
duration: 45 min

healing 95% continence 60%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

last resort final

wide H incision around euo, sharp dissection, sharp mobilization of (para)urethra tissue, tension-free longitudinal urethra_euo rhaphy using paraurethra tissue over 2.5 cm with normalization of urethra_euo by single layer interrupted serafit, bilateral fixation of pcf to paraurethra_euo atf/symphysis by 2x serafit each side, euo/b 1.8 cm, **no** urine thru sutu re line/euo on rest/cough/pressure, triple fixation of foley ch 18, avw reconstruction by avw/cervix advancement flap by 4-point fixation to paraurethra atf/symphysis by everting seralon; free urine flow, euo/bw 13 cm, good anterior elevation, euo/b 1.8 cm normal bladder capacity (longitudinal diameter 13-1.8 = 11 cm) poor position uv-junction **against** caudad third symphysis normal-width 2 cm medium-quality urethra_euo in anatomic position curved incision at anterior anus, sharp dissection, repair of completely **dehiscent** perineal body by 4x serafit, perineum well adapted, check on hemostasis



wide open urethra_euo

RR
preanesthesia: 130/80 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

pt 133 kano mdg unfpa 0035 vvf 4635
 pt **total circumferential trauma** vvf 2683
 pt **third obstetric leakage** rvf 407
 pt **see vvf-katsina 8117** vvf 3714

m i s (kano city) female 24 yr 04.07.11

surgeon: kees waaldijk

assistant: binta musa

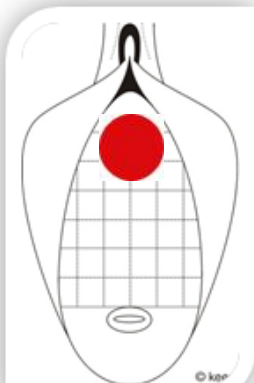
diagnosis: PIII (1 alive), post **IIBb** delivery total urine intrinsic_stress incontinence grade III, leaking urine whilst lying/sitting/standing/walking + **no** spontaneous miction for 2 yr which started immediately following obstructed last labor for 1 day, in hospital mmsh live male, married 11 yr ago post(menarche 2 mth earlier), still living with husband, normal menstruation, drop foot R (grade 4-5) and L (grade 4-5), **healed** rvf, no yankan gishiri, eclampsia delivery I; normal ap diameter/ pubic arch 85°, ar pos, **major** pc_ic_ic m loss, moderate vagina shortening/stenosis, **major** pcf loss with median defect, 2° cervix prolapse euo/c 1 cm **wide open** urethra_euo euo/bw 9 cm, poor elevation, euo/b 0 cm (**loss**), i/v 8 cm 160.0 cm

operation: continent urethralization/fascia/avw reconstruction **last resort final**

duration: 25 min (**step-by-step teaching**) healing 85% continence 60%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

wide H incision around fistula, sharp dissection, sharp mobilization of (para)urethra tissue, tension-free longitudinal urethra_euo rhapsy using paraurethra tissue with longitudinal repair of very poor-quality pc fascia over 3 cm with normalization of urethra_euo, bilateral fixation of pc fascia onto paraurethra atf/symphysis by 1x serafit each side, euo/b 1.6 cm, **no** urine thru euo on rest/cough/pressure, triple fixation of foley ch 18, avw reconstruction by avw/cervix advancement flap by 4-point fixation onto paraurethra atf/symphysis by everting seralon, check on hemostasis; free urine flow, euo/bw 11 cm, good anterior elevation, euo/b 1.6 cm **nb should have reinforced pn body** normal bladder capacity (longitudinal diameter 11-1.6 = 9.5 cm)
 poor position uv-junction **against** caudad third symphysis
 normal-width 1.5 cm poor-quality urethra_euo in anatomic position
 will tissue normalize under physiologic stress/estrogen hormones



wide open urethra_euo

RR
 preanesthesia: 130/80 mm Hg
 5': 120/70
 10': 120/70
 postoperation: 120/70

pt 134

kano
anteriobilateral trauma

vvf 4636
cath 926

h h b (kano city)

female

14 yr

16.05.11

surgeon: kees waaldijk

assistant: binta musa

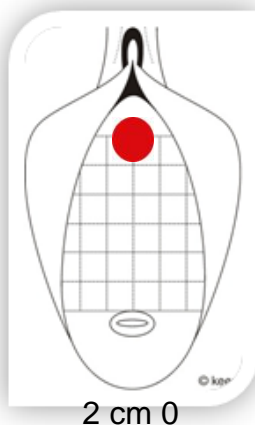
diagnosis: PI (0 alive), ± 2 cm 0 urethrovesicovaginal fistula type **IIAb** with circumferential defect, **leaking urine for 71 days** which started immediately following obstructed labor for 2 days (few hours at home), in hospital rano sb male, married 2 yr ago pre(menarche 1 yr later), not living with husband, no menstruation, drop foot R (grade 4) and L (grade 3), no rvf, no yankan gishiri, eclampsia yes; normal ap diameter/pubic arch 85°, ar pos, cervix mobile, transverse 5x1.5 cm pcf defect
euo/f 2 cm, ab/au 1 cm, f/c 2.5 cm 155 cm

operation: 4/5 circumferential uvvf-repair + transverse pcf repair/bilateral refixation

duration: 30 min (**step-by-step teaching**) healing 95% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision thru/at fistula edge, sharp 4/5 circumferential dissection, tension-free 4/5 circumferential uvvf-repair by end-to-end vesicourethrostomy with transverse fascia repair by single layer of inverting serafit, bilateral fixation of pc fascia onto paraurethra_euo atf/symphysis by 2x serafit each side, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 13 cm, anterior elevation, euo/b 1.9 cm normal bladder capacity (longitudinal diameter 13-1.9 = 11 cm)
acceptable position of uv-junction **fixed against** middle/caudad third of symphysis normal-width 2 cm good urethra_euo in anatomic position



	RR
preanesthesia:	160/100 mm Hg
5':	160/90
10':	150/80
postoperation:	140/80

pt 135

kano mdg

vvf 4637

extensive total circumferential trauma

h a g g (kano city)

female 17 yr

04.07.11

surgeon: kees waaldijk

assistant: binta musa

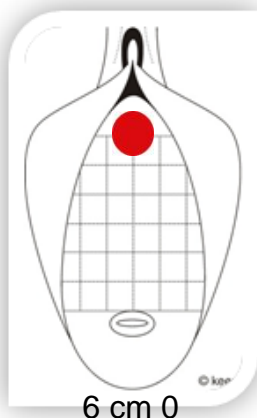
diagnosis: PI (0 alive), **extensive** ± 6 cm 0 urethrovesicovaginal fistula type **IIBb** with circumferential defect whereby uv-junction slipped upwards/fixed to cephalad symphysis, **leaking urine for 56 days** which started immediately following obstructed labor for 3 days, in hosp (2 days) gezawa sb male, married 4 yr ago pre(menarche 3 mth later), not living at husband, no menstruation, drop foot R (grade 2-3) and L (grade 3-4), healed proximal midline 1 cm pvw/cervix trauma (never tusa pv), no rvf, no yan kan gishiri, eclampsia yes; normal ap diameter/pubis arch 85°, ar pos, bilateral atf/atl + pc_ilc_iscm loss, cervix mobile, only 1 cm distal anterior urethra left euo/f 0 cm, f/c 4 cm, ab/au 5 cm, i/v 10 cm 151 cm

operation: circumferential bladder fixation as **first stage minimum surgery**

duration: 25 min healing 85% continence 10%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

episiotomy L, transverse incision thru fistula, sharp circumferential dissection, advancement/caudad fixation of anterior bladder into "euo", tension-free circumferential bladder fixation into "euo" by single layer of inverting serafit, bilateral fixation of pc fascia onto para_euo atf/symphysis by 2x serafit each side, **no** urine thru euo on rest but still + on cough, triple fixation of foley ch 18, transverse avw fixation onto para-euo symphysis by 2x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 13 cm, good anterior elevation, euo/b 0.5 cm (**compression**) normal bladder capacity (**direct** longitudinal diameter 13 cm) poor position of uv-junction **fixed against** caudad third of symphysis normal-width 0.5 cm good-quality urethra_euo almost in anatomic position anterior bladder traumatized/repared in the process



RR
 preanesthesia: 140/90 mm Hg
 5': 130/80
 10': 130/80
 postoperation: 130/80

pt 136

kano mdg
anterior trauma

vvf 014

h y d (kano)

female

26 yr

04.07.11

surgeon: dr idris suleiman abubakar

assistant: dije adamu

diagnosis: PI (0 alive), \pm 3 cm 0 urethrovesicovaginal fistula type **IIBa**, leaking urine for 5 yr which started immediately following obstructed labor for 1 days, at home sb male, married 15 yr ago pre(menarche 2 yr later), still living with husband, normal menstruation, drop foot R (grade 3-4) and L (grade 4), no rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/pubis arch 85°, ar pos, cervix fixed
euo/f 0.5 cm, f/c 4 cm, i/v 9 cm 144 cm

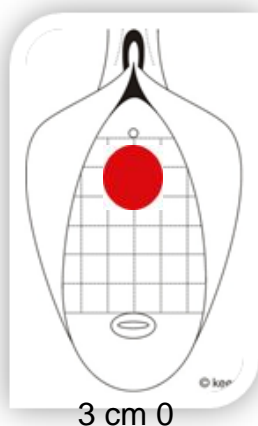
operation: uvvf-repair

duration: 30 min

healing 85% continence 60%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

incision at fistula edge, sharp dissection, tension-free transverse bladder/urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, ballooning of foley ch 18, transverse avw adaptation by 3x everting seralon, check on hemostasis; free urine flow, euo/bw 10 cm, good anterior elevation, euo/b 1.4 cm normal bladder capacity (longitudinal diameter 10-1.4 = 8.5 cm)
poor position of uv-junction **against** caudad third of symphysis
normal-width 1.5 cm medium-quality urethra_euo in anatomic position



	RR
preanesthesia:	120/70 mm Hg
5':	120/70
10':	120/70
postoperation:	120/70

pt 137

kano mdg
anterior trauma

cath 928

m m k g (kano)

female 15 yr

04.07.11

diagnosis: PI (0 alive), total urine intrinsic_stress incontinence grade III, **leaking urine whilst lying/sitting/standing/walking + no spontaneous miction for 17 days** which started immediately following obstructed labor for 5 days (at home 4 days), in hospital (1 day) minjibir sb female, married 2 yr ago pre(menarche 5 mth later), still living with husband, no menstruation, drop foot R (grade 4) and L (grade 4), no rvf, no yankan gishiri, eclampsia yes; normal ap diameter/borderline pubic arch 80°, ar slightly pos, no saddle anesthesia, no flatus incontinence
aww "bulging" **objective stress +++** 147 cm

04.07.11 foley ch 18; free urine flow, euo/bw 14 cm, poor anterior elevation and euo/b 1 cm
normal bladder capacity (longitudinal diameter 14-1 = 13 cm)
poor position of uv-junction **against** caudad third of symphysis
normal-width 1 cm medium-quality urethra_euo in anatomic position

pt 138

kano mdg
anterior trauma

cath 929

a a d (kano city)

female

14 yr

04.07.11

diagnosis: PI (alive), total urine intrinsic-stress incontinence grade III, **leaking urine whilst lying/sitting/standing/walking + no spontaneous miction for 8 days** which started immediately following obstructed labor for 2 days, in hospital mms live male, married 1 yr ago pre(menarche 2 mth later), still living with husband, no menstruation, drop foot R (grade 4) and L (grade 4), no rvf, no yankan gishiri, eclampsia yes; normal ap diameter/pubis arch 85°, ar minimally pos, no saddle anesthesia, no flatus incontinence
aww "bulging" **objective stress ++** obesity ++ 158 cm

04.07.11 foley ch 18; free urine flow, euo/bw 11 cm, poor anterior elevation and euo/b 1 cm
normal bladder capacity (longitudinal diameter 11-1 = 10 cm)
poor position of uv-junction **against** caudad third of symphysis
normal-width 1 cm good-quality urethra_euo in anatomic position

pt 139

kano mdg

vvf 4638

anterior trauma; 6x2 cm longitudinal pcf defect

a a s l (kano)

female

16 yr

05.07.11

surgeon: kees waaldijk

assistant: binta musa

diagnosis: PI alive), total **genuine** postpartum urine intrinsic_stress incontinence grade III, leaking urine whilst lying/sitting/standing/walking + no spontaneous miction for 1 yr which started immediately following obstructed labor for 3 days, in hospital gwarzo (2 days) live male, married 3 yr ago pre(menarche 2 mth later), not living with husband, normal menstruation, drop foot R (grade 4-5) and L (grade 4-5), no rvf, no yankan gishiri, eclampsia yes; normal ap diameter/**wide** pubic arch 90°, ar pos, cervix mobile
euo/c 7 cm cystocele ++ **open** urethra_euo posteriorly pulled inside
euo/bw 14 cm, poor elevation, euo/b 0.4 cm, i/v 11 cm 158 cm

operation: urethralization by longitudinal fascia repair/bilateral fixation

duration: 25 min (**step-by-step teaching**) healing 95% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse curved incision at 2 cm from euo within/parallel to ruga folds, sharp dissection, 6x2 cm median longitudinal fascia defect with bilateral retraction, longitudinal repair/rhaphy of pc fascia at 1-5 cm from euo by serafit, since euo still posteriorly pulled inside bilateral fixation of fascia onto para-euo symphysis/atf by 1x serafit each side with repositioning/normalization of urethra-euo, now euo/b 1.6 cm, **no** urine thru euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 14 cm, good elastic anterior elevation, euo/b 1.6 cm (**urethralization_compression**)
normal bladder capacity (longitudinal diameter 14-1.6 = 12.5 cm due to drinking)
poor position UV-junction **against** caudad third symphysis
good fascia plate good-quality pcm bladder traumatized/repared in the process
normal-width 1.5 cm urethra_euo in anatomic position physiologic stress

RR

preanesthesia: 120/70 mm Hg

5': 120/70

10': 120/70

postoperation: 120/70

pt 140

kano mdg

vvf 4639

anterior + severe iatrogenic mutilation

f i i (ondo)

female

42 yr

05.07.11

surgeon: kees waaldijk

assistant: binta musa

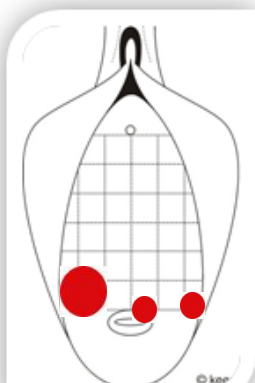
diagnosis: PI (0 alive), **multiple fistulas** as part of **severely mutilated** \pm 2 cm 0 urethrovesicovaginal fistula type **IIAa**, leaking urine for 14 yr which started immediately following cs fmc owo bco obstructed labor for 3 days, in hospital (1 day) sb male, married 15 yr ago post(menarche 14 yr earlier), not living with husband, no menstruation since, bilateral drop foot for 2 mth R (grade 5) and L (grade 5), rvf **healed**, no circumcision/yankan gishiri, no h/o eclampsia; ?ap diameter?/normal pubic arch 85°, ar pos, cervix not identified, vault fixed, operated 2x (abd_owo and vag_ibadan-uch_ojengbede), severe vagina shortening
 euo/f 2 cm, f/v 0 cm, i/v 4 cm 167 cm

operation: uvvf-repair as **minimum surgery**

duration: 20 min healing 85% continence 80%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

nb euo/bw **increased** due to high-voluke drinking from 6.5 to 13 cm
 transverse incision thru fistulas/"vault", minimal sharp dissection, tension-free transver se bladder/rectum closure by single layer of inverting serafit, **no** urine thru suture line/ euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw/pvw adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 13 cm, good anterior elevation, euo/b 2.3 cm scarring ++/everything fixed
 normal bladder capacity (longitudinal diameter 13-2.3 = 10.5 cm)
 good position of uv-junction **against** middle third of symphysis
 deformed 2.5 cm medium-quality urethra_euo posteriorly pulled inside due to scarring
 the **problem: scar tissue ++/severe iatrogenic mutilation/everything fixed**



multiple fistulas = 2 cm 0

RR

preanesthesia: 140/90 mm Hg
 5': 130/80
 10': 130/80
 postoperation: 130/80

pt 141

kano mdg

vvf 4640

anterior/posterior trauma + iatrogenic

rvf

h a g (kano)

female

42 yr

05.07.11

surgeon: kees waaldijk

assistant: binta musa

diagnosis: PVIII (4 alive), **mutilated** \pm 2 cm 0 "intracervical" cs-vesicocervicouterovaginal fistula type I into uterine cavity (though it looks like sth), **mutilated** \pm 2 cm proximal rectovaginal fistula type IA midline fixed to posterior cervix remnant, leaking urine/passing stools pv for 15 which started immediately following cs piv clin bco obstructed last labor for 3 days, sb male, married 30 yr ago post(menarche 3 mth earlier), still living with husband, ?normal menstruation?, bilateral drop foot for 1 mth R (grade 5) and L (grade 5), no yankan gishiri, no h/o eclampsia; normal ap diameter/narrow short pubic arch 70°, ar pos, cervix remnants fixed midline, operated 2x danbat euo/f 6 cm, f" c" 0 cm, i/v 12 cm 155 cm

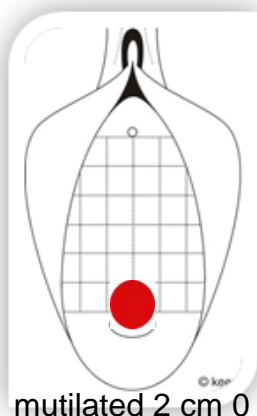
operation: **complicated** sth-cs-vcuvf-repair

duration: 40 min

healing 85% continence 75%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

episiotomy L, incision at fistula edge/thru posterior cervix remnant, sharp dissection, **complicated** tension-free transverse bladder/posterior cervix closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw_ anterior cervix/posterior cervix_pvw adaptation by 2x evert ing seralon, check on hemostasis, skin closure; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 1.9 cm **too complicated** for rvf-repair now normal bladder capacity (longitudinal diameter 12-1.9 = 10 cm) good position of uv-junction **against** middle third of symphysis since deformed 2 cm poor.quality urethra_euo posteriorly pulled inside pat **not** drinking if menstruating then thru euo as discussed with/agreed upon by patient



RR
 preanesthesia: 140/90 mm Hg
 5': 130/80
 10': 130/80
 postoperation: 130/80

Pt 142

kano mdg

vvf 4641/2400

extensive total circumferential trauma

rvf 337

f m k (kano)

female

27 yr

05.07.11

surgeon: dr idris suleiman abubakar/kees waaldijk

assistant: trainee

diagnosis: PI, **inoperable very extensive residual** \pm 1 cm 0 urethrovesicovaginal fistula **IIAb** with circumferential defect/urethra block following uvvf-"repair" as **last/ only** operation 07.11.01, no living with husband, no menstruation, drop foot R (grade 5) and L (grade 4-5); a small ap diameter/narrow pubic arch 75°, major pc muscle loss, rvf **healed**, severe funnel-shape vagina stenosis/shortening
euo/f 1.5 cm, f" c" 0 cm, i/v 3 cm

144.0 cm

operation: assessment: **inoperable**

final

duration: 10 min

anesthesia: spinal L4/L5 with 4 ml bupivacaine 0.5%

since severe scarring/fibrosis and everything fixed
even if closure could be achieved only 10% chance of continence

inoperable

RR

preanesthesia: 130/80 mm Hg

5": 120/70

10": 120/70

postoperation: 120/70

pt 143

kano mdg
anterior trauma

vvf 015

rabi hamza k/kuka (kano city)

female

15 yr

05.07.11

surgeon: dr idris suleiman abubakar

assistant: hafsat ibrahim

diagnosis: PI (0 alive), ± 2 cm 0 urethrovesicovaginal fistula type I midline, leaking urine for 3 mth which started immediately following obstructed labor for 3 days, in hospital danbatta sb female, married 2 yr ago post(menarche 3 mth earlier), not living with husband, no menstruation, drop foot R (grade 4) and L (grade 4), no rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/pubis arch 85°, ar pos, cervix mobile
euo/f 5 cm, f/c 1 cm, i/v 11 cm 155 cm

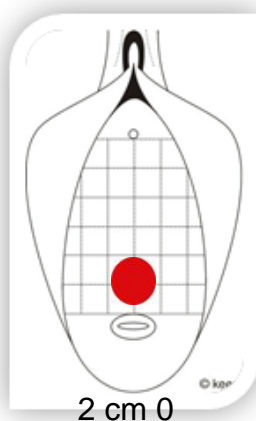
operation: vvf-repair

duration: 30 min

healing 90% continence 90%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

episiotomy R, incision at fistula edge, sharp dissection, tension-free transverse bladder/urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 14 cm, good anterior elevation, euo/b 2.6 cm
normal bladder capacity (longitudinal diameter 14-2.6 = 11.5 cm)
good position of uv-junction **against** middle third of symphysis
normal-width 2.5 cm good-quality urethra_euo in anatomic position



	RR
preanesthesia:	140/100 mm Hg
5':	140/90
10':	130/80
postoperation:	120/80

**cut-thru trauma; the principles of repair; sphincter ends at 11.30 & 12.30 hr
anorectum reconstruction up to anocutaneous junction**

amina abduhahi jaen (kano city)

female

24 yr

06.07.11

surgeon: kees waaldijk

assistant: binta musa

diagnosis: PII (all alive), residual sphincter ani rupture with 0.5 cm longitudinal ano rectum trauma, now only stool incontinence for 5 mth which started immediately following last labor for 1 day, in hospital mmsh live male, married 4 yr ago post(menarche 7 yr earlier), still living with husband, no menstruation, no drop foot R (grade 5) and L (grade 5), no vvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/**wide** pubic arch 95°, ar pos, operated 8.3.11 (laure_im) obesity +++ never leaking urine a/f 0 cm, i/v 14 cm tight introitus since perineum too long 151 cm

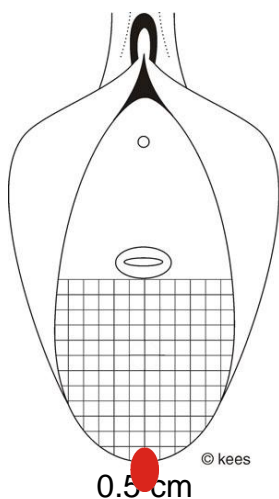
operation: anorectum closure and sphincter ani_perineal body reconstruction

duration: 20 min (**step-by-step teaching**) healing 95% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

longitudinal median incision thru **scarred** perineum up to anorectum defect, minimal sharp dissection with freshening of retracted sphincter ends, tension-free longitudinal anorectum closure with adaptation_rhaphy of internal sphincter up to anocutaneous junction (with repositioning of anterior anus) by 1x inverting serafit, inner ring of external sphincter adapted, end-to-end external sphincter ani reconstruction by 2x serafit, perineal body repair with (in)direct re-union of transversus perinei muscles and (in)direct posterior re-union of bulbocavernosus muscles by 2x serafit, perineum well adapted with anus in anatomic position, check on hemostasis

foley ch 18; free urine flow, euo/bw 12 cm, good elevation, euo/b 2 cm



	RR
preanesthesia:	140/80 mm Hg
5':	130/80
10':	130/80
postoperation:	130/80

nicely healed first stage type IIBb minimum surgery

asmau maigoro kiyawa (kano)

female

16 yr

06.07.11

surgeon: kees waaldijk

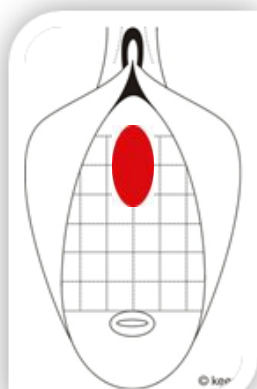
assistant: binta musa

diagnosis: residual 2x1 cm urethrovaginal fistula = distal urethra loss following **nicely healed** circumferential bladder fixation as **first stage** 8.11.10, not living with husband, normal menstruation, drop foot R (grade 4-5) and L (grade 4-5); normal ap diameter/pubis arch 85°, ar pos, bilateral atf/atl + pc_iloc_iscm loss, cervix fixed/retracted midline
euo/f 0 cm, f/c 3 cm, ii/v 10 cm 156 cm

operation: continent urethra/fascia/avw reconstruction as **second stage**duration: 45 min (**step-by-step teaching**) healing 85 continence 60%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

re-episiotomy L, wide H incision around fistula, sharp dissection, sharp mobilization of (para)urethra tissue, tension-free longitudinal urethra reconstruction over 2 cm with repositioning of retracted uv-junction by single layer of inverting interrupted serafit, bilateral fixation of good-quality pc fascia onto paraurethra_euo atf/symphysis by 2x serafit each side, euo/b 1.3 cm, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, avw reconstruction by avw advancement flap by 4-point fixation onto paraurethra_euo atf/symphysis by everting seralon, check on hemostasis; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 1.3 cm
normal bladder capacity (longitudinal diameter 12-1.3 = 10.5 cm)
poor position uv-junction **against** caudad third symphysis
normal-width 1.5 cm good-quality urethra_euo in anatomic position
the **problem: continuous pull/traction by fixed cervix onto posterior urethra wall**



longitudinal 2x1 cm

RR
preanesthesia: 130/80 mm Hg
5': 120/70
10': 120/70
postoperation: 120/70

pt 146
pt 147

kano
kano

vvf 4643
rvf 764/749

anterior + cut-thru trauma

a j k f (kano city) female 31 yr 06.07.11

surgeon: kees waaldijk

assistant: binta musa

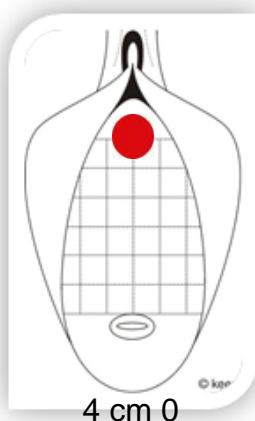
diagnosis: PV (2 alive), \pm 4 cm 0 urethrovesicovaginal fistula up to L cephalad symphysis with bladder base prolapse type **IIAb**, leaking urine for 5 mth that started immediately following obstructed labor for 3 days (1 home 2 hosp), in hospital sb male, married 18 yr ago pre(menarche 3 mth later), still living with husband, no menstruation, drop foot R (grade 4-5) and L (grade 4), no yankan gishiri, no h/o eclampsia; normal AP diameter/**wide** pubic arch 95°, AR pos, still small anterior sphincter ani defect from 11.30 to 12.30 hr (total stool_flatus continence), immediate suturing pp, cervix fixed midline, obesity ++, bilateral atf/atl + pc_ilc_iscm loss L >> R
euo/f 2.5 cm, f/c 0 cm, i/v 9 cm 168 cm

operation: ureter R, uvvf-repair and sphincter ani_perineal body repair

duration: 60 min (**step-by-step teaching**) healing both 95% continence both 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

re-episiotomy L, both ureters identified but only R can be catheterized for 20 cm, incision at fistula edge, sharp 3/4 dissection, **under some tension** 3/4 circumferential bladder urethra closure with bilateral fixation of pc fascia onto paraurethra_euo atf by single layer of inverting serafit, **no** urine thru euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw/mutilated cervix adaptation by 3x everting seralon; free urine flow, euo/bw 11 cm, good anterior elevation, euo/b 2.6 cm
normal bladder capacity (longitudinal diameter 11-2.6 = 8.5 cm)
good position of uv-junction **against** middle third of symphysis
normal-width 2.5 cm good-quality urethra_euo in anatomic position
extension of episiotomy to over anterior anus, sharp dissection, tension-free end-to-end sphincter ani reconstruction by 2x serafit, perineal body reinforcement by 2x serafit, check on hemostasis, episiotomy closure



RR
preanesthesia: 130/80 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

pt 147
pt 146

kano
kano

rvf 764/749
vuf 4643

anterior + cut-thru trauma

a j k f (kano city)

female

31 yr

06.07.11

surgeon: kees waaldijk

assistant: binta musa

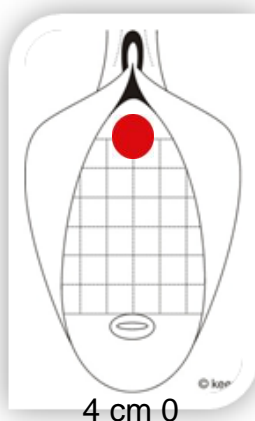
diagnosis: PV (2 alive), \pm 4 cm 0 urethrovesicovaginal fistula up to L cephalad symphysis with bladder base prolapse type **IIAb**, leaking urine for 5 mth that started immediately following obstructed labor for 3 days (1 home 2 hosp), in hospital sb male, married 18 yr ago pre(menarche 3 mth later), still living with husband, no menstruation, drop foot R (grade 4-5) and L (grade 4), no yankan gishiri, no h/o eclampsia; normal AP diameter/**wide** pubic arch 95°, AR pos, still small anterior sphincter ani defect from 11.30 to 12.30 hr (total stool_flatus continence), immediate suturing pp, cervix fixed midline, obesity ++, bilateral atf/atl + pc_ilc_iscm loss L >> R
euo/f 2.5 cm, f/c 0 cm, i/v 9 cm 168 cm

operation: ureter R, uvvf-repair and sphincter ani_perineal body repair

duration: 60 min (**step-by-step teaching**) healing both 95% continence both 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

re-episiotomy L, both ureters identified but only R can be catheterized for 20 cm, incision at fistula edge, sharp 3/4 dissection, **under some tension** 3/4 circumferential bladder urethra closure with bilateral fixation of pc fascia onto paraurethra_euo atf by single layer of inverting serafit, **no** urine thru euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw/mutilated cervix adaptation by 3x everting seralon; free urine flow, euo/bw 11 cm, good anterior elevation, euo/b 2.6 cm
normal bladder capacity (longitudinal diameter 11-2.6 = 8.5 cm)
good position of uv-junction **against** middle third of symphysis
normal-width 2.5 cm good-quality urethra_euo in anatomic position
extension of episiotomy to over anterior anus, sharp dissection, tension-free end-to-end sphincter ani reconstruction by 2x serafit, perineal body reinforcement by 2x serafit, check on hemostasis, episiotomy closure



RR
preanesthesia: 130/80 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

pt 148

kano mdg
anterior/posterior trauma

vvf 016
rvf

b m b g (kano city)

female 15 yr

06.07.11

surgeon: dr idris suleiman abubakar

assistant: hafsat ibrahim

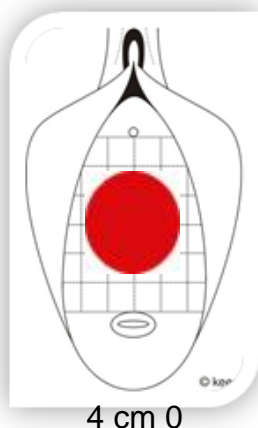
diagnosis: PI (0 alive), \pm 4 cm 0 urethrovesicovaginal fistula type **IIAa, leaking urine for 28 days** that started immediately following obstructed labor of 2 days, in hosp mmsh (1 day) sb female, married 15 mth ago post(menarche 1 yr earlier), not living with husband, no menstruation, drop foot R (grade 4) and L (grade 4), no rvf, no yankan gishiri, eclampsia yes; normal ap dia meter/pubic arch 85°, ar slightly pos, flatus incontinence, cervix mobile euo/f 2 cm, f/c 2 cm, i/v 13 cm 145 cm

operation: uvvf-repair

duration: 50 min healing 85% continence 85%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

episiotomy R, incision at fistula edge, sharp dissection, tension-free longitudinal bladder_urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, ballooning of foley ch 18, longitudinal avw adaptation by 2x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 13 cm, good anterior elevation, euo/b 2.5 cm
normal bladder capacity (longitudinal diameter 13-2.5 = 10.5 cm)
good position of uv-junction **against** middle third of symphysis
normal-width 2.5 cm good-quality urethra_euo in anatomic position



RR
preanesthesia: 120/80 mm Hg
5': 120/70
10': 120/70
postoperation: 120/70

pt 149

kano mdg
iatrogenic trauma

vvf 017

vvf 1998/2663

m a g (kano)

female

52 yr

06.07.11

surgeon: dr idris suleiman abubakar

assistant: hafsat ibrahim

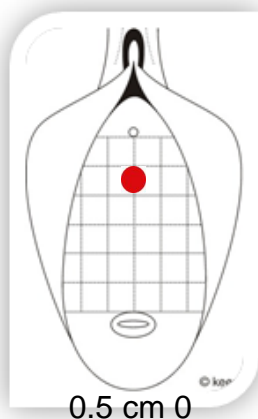
diagnosis: PIX (allalive), residual ± 0.5 cm 0 urethrovesicovaginal fistula type **IIBa** at midline following multiple repairs 6.3.00 to 15.7.02 and 1x (mmsh_im), still living with husband, menopause 5 yr ago; normal ap diameter/pubis arch 85°, ar pos, cervix mobile
euo/f 2 cm, f/c 5 cm, i/v 9 cm 161.5 cm

operation: uvvf-repair

duration: 30 min healing 90% continence 50%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision thru/at fistula, sharp dissection, tension-free transverse bladder/urethra closure with fascia repair by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, ballooning of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 10 cm, moderate anterior elevation, euo/b 1.6 cm
normal bladder capacity (longitudinal diameter 10-1.6 = 8.5 cm)
poor position of uv-junction **against** caudad third of symphysis
normal-width 1.5 cm medoium-quality urethra_euo in anatomic position



	RR
preanesthesia:	130/90 mm Hg
5':	130/80
10':	120/70
postoperation:	120/70

pt 150 kano mdg vvf 018 vvf 2111
total circumferential trauma

b h t (kano) female 25 yr 06.07.11

surgeon: dr imam amir yola

assistant: hafsat ibrahim

diagnosis: PI (0 alive), total post **extensive IIAb** urine intrinsic-stress incontinence grade III, leaking urine whilst lying/sitting/standing/walking for 11 yr after successful closure 16.10.00, still with husband, no menstruation, drop foot R (grade 5) and L (grade 5); borderline ap diameter/narrow pubic arch 60°, lpl stricture patient
 euo/bw 13 cm, poor elevation, euo/b 1 cm, i/v 6 cm 149.0 cm

operation: elevation of bladder neck

duration: 30 min healing 85% continence 70%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

bilateral severing of lpl stricture, transverse curved incision at 1 cm from euo, rhapsy of pc fascia at 1-4 cm from euo by single layer of serafit, euo/b bilateral fixation of pc fascia onto paraurethra_euo atf by 2x serafit each side, euo/b 2.4 cm, **no** urine thru euo on rest/cough/pressure, ballooning of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 13 cm, good anterior elevation, euo/b 2.4 cm
 normal bladder capacity (longitudinal diameter 13-2 = 11 cm)
 good position of uv-junction **against** middle third of symphysis
 normal-width 2.5 cm medium urethra_euo in anatomic position

RR
 preanesthesia: 120/70 mm Hg
 5': 120/70
 10': 120/70
 postoperation: 120/70

pt 151

kano mdg

vvf 4644

anterior trauma; demonstration of complicated minute fistula

h u r/k (kano city)

female

32 yr

07.07.11

surgeon: kees waaldijk

assistant: binta musa

diagnosis: PVI (1 alive), **minute** < 0.1 cm 0 urethrovesicovaginal fistula type **IIAa** at midline within 4x0.2 cm transverse avw/pcf trauma, leaking urine for 5 yr which started immediately following ?sth?-cs jahun (1 day) bco obstructed last labor for 2 days, sb male, married 20 yr ago pre(menarche 9 mth later), still living with husband, ?little? menstruation, bilateral drop foot R (grade 4) and L (grade 5), no rvf, no yankan gishiri, eclampsia delivery I; normal ap diameter/pubic arch 85°, ar pos, cervix remnants fixed midline, **objective** stress **+++**/deformed urethra_euo due to traction by scarring + euo/f 2.5 cm, f/c 3 cm, i/v 11 cm 150 cm

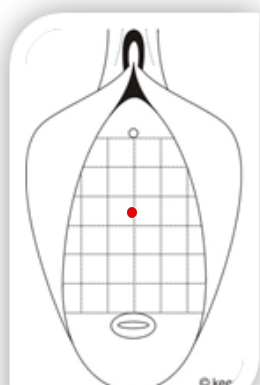
operation: **complicated** uvvf-repair

duration: 40 min

healing 90% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

episiotomy L, transverse incision thru fistula/avw trauma, sharp dissection, excision of scar tissue ++, then **gv needed to identify fistula**, tension-free transverse pc fascia repair with bladder/urethra closure by single layer of inverting serafit with normalization of urethra-euo, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 14 cm, good anterior elevation, euo/b 2.2 cm normal bladder capacity (longitudinal diameter 14-2.2 = 12 cm) good position of uv-junction **against** middle third of symphysis normal-width 2 cm good-quality urethra_euo in anatomic position



minute < 01 cm 0

RR
 preanesthesia: mm Hg
 5':
 10':
 postoperation:

pt 152 kano mdg vvf 4645
pt katsina; **total circumferential trauma; second fistula** vvf 6417

s n f (katsina) female 22 yr 07.07.11

surgeon: kees waaldijk

assistant: binta musa

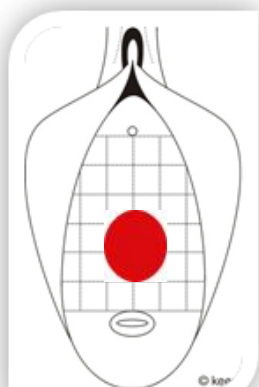
diagnosis: PII, **second extensive** ± 1.5 cm 0 urethrovesicovaginal fistula type **IIBb**, leaking urine for 6 mth which started immediately following obstructed labor for 1 day, in hospital funtua sb male, married 10 yr ago pre(menarche 1 yr later), still living with husband, no menstruation, drop foot R (grade 4) and L (grade 4), no rvf, no yankan gishiri, eclampsia delivery I; normal ap diameter/pubis arch 85°, ar pos, bilateral atf/atl + major pc_io: ilc_iscm loss (**bare pubic bones**), slight lpl stricturedistal, 2° cervix prolapse, more or less ok until PII, **wide open traumatized** urethra_euo euo/f 1 cm, f/c 0.5 cm, i/v 8 cm obesity ++ 160.0 cm

operation: "continent urethra/fascia/avw reconstruction" **last resort**

duration: 40 min (**step-by-step teaching**) healing 85% continence 60%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

re-episiotomy L, wide H incision around fistula, sharp dissection, sharp mobilization of (para)urethra tissue, tension-free longitudinal urethra reconstruction over 1.5 cm with repositioning of retracted uv-junction by single layer of inverting interrupted serafit, bilateral fixation of "pc fascia"/cervix onto para_euo atf/symphysis by 1x serafit each side, euo/b 1.2 cm, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, avw reconstruction by avw/cervix advancement flap by 4-point fixation to paraurethra_euo atf/symphysis by everting seralon, check on hemostasis, episiotomy closure; free urine flow, euo/bw 8 cm, good anterior elevation, euo/b 1.2 cm normal bladder capacity (longitudinal diameter 8-1.2 = 7 cm)
poor position uv-junction **against** caudad third symphysis PII (0 alive)
normal-width 1 cm poor-quality urethra_euo in anatomic position



extensive 1.5 cm 0

RR
preanesthesia: 140/80 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

pt 153

kano mdg

vvf 4647

extensive total circumferential trauma + iatrogenic; inoperable type IIBb & Ia

s u k d/t (kano city)

female

38 yr

07.07.11

surgeon: kees waaldijk/dr idris suleiman abubakar

assistant: binta musa

pt 651 rvf 765

diagnosis: PI (0 alive), **mutilated extensive** ± 2.5 cm 0 urethrovesicovaginal fistula type **IIBb** with circumferential defect, **scarred** 1.5 cm 0 proximal rvf at R type **Ia** within stone hard fibrosed pvw fixed to "cervix", leaking urine/ passing stool pv for 20 yr which started immediately following obstructed labor for 3 days, in hospital gwarzo sb male, married 25 yr ago pre (menarche 1 mth later), still living with husband, normal menstruation, bilateral drop foot for 2 mth R (grade 5) and L (grade 5), no yankan gishi ri, no h/o eclampsia; normal ap diameter/pubis arch 85°, ar pos, bilateral **major** atf/atl + pc_io_iloc_iscm loss, cervix fixed, severe vagina stenosis, operated 1x (zaria_abuth), "cervix" fixed
euo/f 0 cm, f/c 2.5 cm, ab/au 3 cm, a/f 5 cm, i/v 6 cm 147 cm

operation: **final** assessment of "**inoperable**" type **IIBb** and **Ia** fistulas

duration: 25 min

healing

continence

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

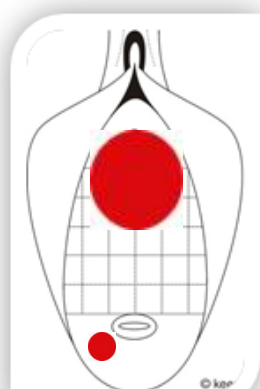
bilateral episiotomy with severing of **stone-hard** stenosis

severely mutilated type **IIBb** fistula with bilateral ureter prolapse, direct bladder diameter 4 cm even if it would be possible to close it **no chance of continence**

mutilated type **Ia** proximal rvf at R fixed to cervix; it is "possible" to close it but then menstruation thru anus

it is far **too dangerous to continue**

meticulous closure of episiotomies, check on hemostasis



extensive 2.5 cm 0

RR

preanesthesia: 170/100 mm Hg

5': 160/100

10': 150/90

postoperation: 150/90

pt 154

kano mdg

rvf 765

extensive total circumferential trauma + iatrogenic; inoperable type IIBb & Ia

s u k d/t (kano city)

female

38 yr

07.07.11

surgeon: kees waaldijk/dr idris suleiman abubakar

assistant: binta musa

pt 3861

rvvf 4647

diagnosis: PI (0 alive), **mutilated extensive** ± 2.5 cm 0 urethrovesicovaginal fistula type **IIBb** with circumferential defect, **scarred** 1.5 cm 0 proximal rvf at R type **Ia** within stone hard fibrosed pvw fixed to "cervix", leaking urine/ passing stool pv for 20 yr which started immediately following obstructed labor for 3 days, in hospital gwarzo sb male, married 25 yr ago pre (menarche 1 mth later), still living with husband, normal menstruation, bilateral drop foot for 2 mth R (grade 5) and L (grade 5), no yankan gishi ri, no h/o eclampsia; normal ap diameter/pubis arch 85°, ar pos, bilateral **major** atf/atl + pc_io_ilc_iscm loss, cervix fixed, severe vagina stenosis, operated 1x (zaria_abuth), "cervix" fixed
 euo/f 0 cm, f/c 2.5 cm, ab/au 3 cm, a/f 5 cm, i/v 6 cm 147 cm

operation: **final** assessment of "**inoperable**" type **IIBb** and **Ia** fistulas

duration: 25 min

healing

continence

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

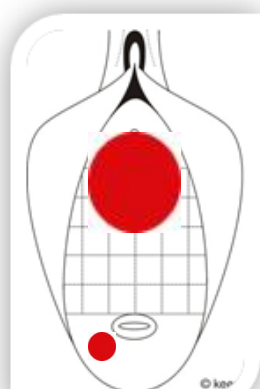
bilateral episiotomy with severing of **stone-hard** stenosis

severely mutilated type **IIBb** fistula with bilateral ureter prolapse, direct bladder diameter 4 cm even if it would be possible to close it **no chance of continence**

mutilated type **Ia** proximal rvf at R fixed to cervix; it is "possible" to close it but then menstruation thru anus

it is far **too dangerous to continue**

meticulous closure of episiotomies, check on hemostasis



extensive 2.5 cm 0

RR

preanesthesia: 170/100 mm Hg

5': 160/100

10': 150/90

postoperation: 150/90

pt 155

kano mdg
anterior trauma

vvf 019

w m y-m (kano)

female

16 yr

07.07.11

surgeon: dr idris suleiman abubakar

assistant: hafsat ibrahim

diagnosis: PII (0 alive), \pm 1 cm 0 urethrovesicovaginal fistula type **I** at midline, **leaking urine for 39 days pp** which started immediately (upon catheter removal 10 days) following obstructed last labor for 1 day, in hospital gezawa sb male, married 3 yr ago pre(menarche 4 mth later), not living with husband, no menstruation, drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, eclampsia yes; normal ap diameter/pubic arch 85°, ar pos, cervix mobile
euo/f 5 cm, f/c 1 cm, i/v 13 cm 151 cm

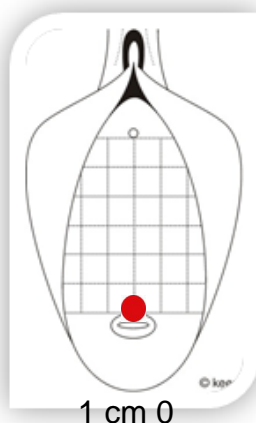
operation: vvf-repair

duration: 30 min

healing 90% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

episiotomy L, transverse incision thru/at fistula edge, sharp dissection, tension-free transverse bladder closure by single layer of inverting serafit, **no** urine thru suture line/ euo on rest/cough/pressure, ballooning of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 14 cm, good anterior elevation, euo/b 2.6 cm
normal bladder capacity (longitudinal diameter 14-2.6 = 11.5 cm)
good position of uv-junction **against** middle third of symphysis
normal-width 2.6 cm good-quality urethra_euo in anatomic position



RR

preanesthesia: 160/100 mm Hg
 5': 150/100
 10': 150/90
 postoperation: 140/90

pt 156

kano mdg
total circumferential trauma

vvf 020
cath 930

f a b k (kano)

female

14 yr

07.07.11

surgeon: dr imam amir yola

assistant: hafsat ibrahim

diagnosis: PI (0 alive), overflow incontinence due to atonic bladder with severe distal vagina stenosis, leaking urine for 4 mth which started 10 days following obstructed labor for 3 days, in hospital gwarzo (1 day) sb male, married 1.5 yr ago pre(menarche 4 mth later), still with husband, normal menstruation, drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/pubis arch 85°, ar pos, cervix mobile euo/bw 20 cm, poor elevation, euo/b 1.6 cm, i/v 10 cm 148 cm

operation: gradual dilatation of distal vagina stenosis + catheter

duration: 20 min healing 95% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

gradual dilatation of distal vagina stenosis

ballooning of foley ch 18; free urine flow

increased bladder capacity (longitudinal diameter 20-1.6 = 18.5; **atonic bladder**)

poor position of uv-junction **against** caudad third of symphysis

normal-width 1.5 cm good-quality urethra_euo in anatomic position

RR

preanesthesia: 130/80 mm Hg

5': 120/70

10': 120/70

postoperation: 120/70

pt 157 kano mdg vvf 4648

anteriobilateral + iatrogenic trauma; pat not cooperative with history

pt **don't be surprised if she has delivered again** vvf 1272

h h b (kano) female 33 yr 08.07.11

surgeon: kees waaldijk

assistant: binta musa

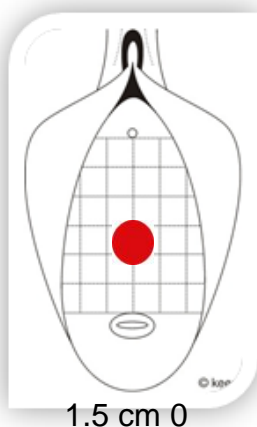
diagnosis: PII (0 alive), **new** \pm 1.5 cm urethrovesicovaginal fistula midline type **IIBb** after period of vomiting/fever/headach 6 mth following **successful** urethra /avw reconstruction 25.3.96, , leaking 15 yr after "miscarriage", at home sb female married 20 yr ago pre(menarche 3 mth later) not living with husband, normal menstruation, bilateral drop foot for 2 mth (now both grade 5), no rvf, no eclampsia; normal ap diameter/**wide** pubic arch 95°, operated 1x (zaria_abuth), **no** longer mutilation, bilateral atf/atl + pc_io_ ilc_iscm loss, no pcf connection at L to atf obesity ++
euo/f 3 cm, f/c 2 cm, i/v 12 cm 159.5 cm

operation: uvvf-repair + bilateral pcf refixation

duration: 40 min healing 90% continence 60%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

re-episiotomy L, transverse incision thru/at fistula edge, sharp dissection, tension-free transverse bladder/urethra closure by single layer of inverting serafit, bilateral fixation of poor-quality "pc fascia" onto paraurethra_euo atf/symphysis by 2x serafit each side, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 13 cm, good anterior elevation, euo/b 2.4 cm
normal bladder capacity (longitudinal diameter 13-2.4 = 10.5 cm)
good position of uv-junction **fixed against** middle third of symphysis
normal-width 2.5 cm medium-quality urethra_euo in anatomic position



RR
preanesthesia: 130/80 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

pt 158
pt

kano mdg
third obstetric fistula

vvf 4649
vvf 4251
cath 808

h i k (kano city)

female

27 yr

08.07.11

surgeon: kees waaldijk

assistant: binta musa

diagnosis: PVII (3 alive), \pm 0.5 cm 0 "cs"-vesicocervicouterovaginal fistula type I slightly at L, leaking urine for 3 mth which started immediately following obstructed last labor for 2 day, in hospital (2 days as booked for elective cs but not done) sb male, married 14 yr ago post(menarche 2 mth earlier), still at husband, normal menstruation, no (h/o) drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri; normal ap diameter/pubis arch 85°, ar pos, anterior cervix_uterus loss, cervix fixed/retracted
EUO/F 6 cm, F/C 0 cm, i/v 11 cm obesity ++ 145.0 cm

operation: "cs"-vcvf-repair

duration: 20 min

healing 85% continence 85%

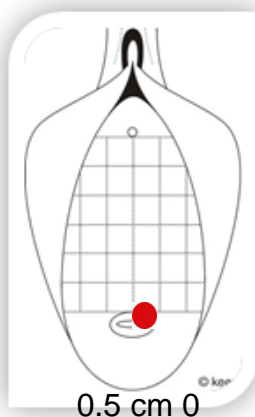
anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision thru fistula/"cervix", sharp dissection, tension-free transverse bladder closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw/L cervix adaptation by 1x everting seralon, check on hemostasise; free urine flow, euo/bw 13 cm, good anterior elevation, euo/b 1.0 cm

normal bladder capacity (longitudinal diameter 13-1.0 = 12 cm)

poor position of uv-junction **against** caudad third of symphysis

normal-width 1 cm good-quality urethra_euo in anatomic position



RR
preanesthesia: 130/80 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

s m r (kano city)

female

30 yr

08.07.11

surgeon: dr idris suleiman abubakar

assistant: hafsat ibrahim

diagnosis: PI (0 alive), completely obliterated "neourethra" after multiple repairs 16.6.97 to 8.6.06 of **extensive obstetric** + 3 cm 0 urethrovesicovaginal fistula **IIb** with circumferential defect/bladder base prolapse, not with husband, normal menstruation, drop foot R (grade 4-5) and L (grade 5), no rvf, yankan gishiri during labor by ungozoma; ?ap diameter?/narrow pubic arch 75°, severe vagina stenosis/shortening, ba hanya ko kadan euo/stenosed bladder opening 1 cm, bo/c 1 cm, i/v 4 cm 143.0 cm

operation: dilatation + urethra/avw reconstruction

last resort final

duration: 30 min

healing 60% continence 40%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

gradual dilatation of bladder opening, wide U incision, sharp dissection of scarred paraurethra tissue, bilateral fixation of "pc fascia" onto paraurethra atf by 1x serafit each side, tension-free longitudinal urethra reconstruction by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, avw covering by small rotation flap from L labia, check on hemostasis; free urine flow, euo/bw 8 cm, good anterior elevation, euo/b 1.0 cm
 normal bladder capacity (longitudinal diameter 8-1.0 = 7 cm)
 poor position of uv-junction **against** caudad third of symphysis
 normal-width 1 cm poor-quality urethra_euo in anatomic position
 the **problem right from the beginning: severe scarring/fibrosis**

RR

preanesthesia: 130/90 mm Hg

5': 130/90

10': 130/80

postoperation: 130/80

pt 160

kano mdg

vvf 4650

post IIAb repair; anteriopbilateral trauma

h a y (kano city)

female

23 yr

09.07.11

surgeon: kees waaldijk

assistant: binta musa

diagnosis: PIV (2 alive), **mutilated** post **IIAb** total urine intrinsic_stress incontinence grade III, leaking urine whilst lying/sitting/standing/walking + no spontaneous for 8 mth following circumferential repair 1.11.10 which started immediately following obstructed last labor for 2 days, in hospital (1 day) d/tofa sb male **twins**, married 10 yr ago pre(menarche 3 mth later), still living with husband, normal menstruation, no drop foot R (grade 4) and L (grade 5), no rvf; normal ap diameter/**wide** pubic arch 95°, ar pos, cervix mobile, bilateral atf/atl + pc_ilc_iscm loss
euo/c 6 cm **deformed** urethra_euo in anatomic position
euo/bw 12 cm, poor elevation (cystocele +++), euo/b 0.5 cm,i/v 12 cm

operation: urethralization by longitudinal fascia repair/refixation 153 cm

duration: 25 min (**step-by-step teaching**) healing 95% continence 85%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

urine level in accord with respiration excision of mutilated avw
transverse incision at 1 cm from euo thru repair scar, sharp dissection, longitudinal 4x1.5 cm fascia defect from cervix up to 1.5 cm from euo, longitudinal repair/rhaphy of inflamed pc fascia from 1.5 to 5 cm from euo by serafit, bilateral fixation of fascia onto paraurethra_euo atf by 2x seralon each side with normalization of urethra_euo, euo/b now 1.6 cm, **no** urine thru euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 1.6 cm (**urethralization_compression**)
normal bladder capacity (longitudinal diameter 12-1.6 = 10.5 cm)
poor position of uv-junction **against** caudad third of symphysis good fascia plate
normal-width 1.5 cm medium-quality urethra_euo in anatomic position
under physiologic stress inflammation wil disappear and tissues will normalize

RR

preanesthesia: 120/70 mm Hg

5': 120/70

10': 120/70

postoperation: 120/70

pt 161
pt

kano mdg

vvf 4651
rvf 149

total circumferential trauma; inoperable IIAb

i l k (kano)

female

40 yr

09.07.11

surgeon: kees waaldijk

assistant: binta musa

diagnosis: PVI (3 alive), **extensive** ± 4 cm 0 urethrovesicovaginal fistula type **IIAb** fixed to cephalad symphysis with circumferential defect/subtotal bladder loss, leaking urine for 17 yr which started immediately following last obstructed for 3 days, in hospital sb male, married 28 yr ago pre(menarche 1 yr later), not living with husband, normal menstruation, drop foot R (grade 3-4) and L (grade 4-5), no yankan gishiri, no h/o eclampsia; ?ap diameter/borderline pubic arch 80°, moderate vagina stenosis/shortening, bilateral atf/atl + ilc_iscm loss (paraurethra intact), rvf **healed**; "cervix" with in scarred proximal vagina stricture
euo/f 3.5 cm, f" c" 0 cm, ab/au 2 cm, i" c" 4 cm 158.0 cm

operation: **final assessment inoperable IIAb**

duration: 10 min

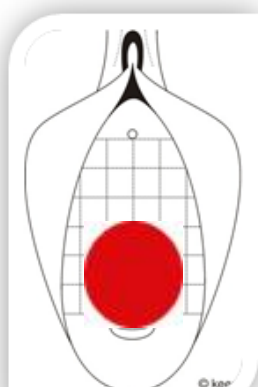
healing

continence

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

goode-quality urethra_euo in anatomic position totally attached to symphysis, direct bladder longitudinal diameter 2.5 cm
since everything fixed it is not possible/advisable to do anything

final decision: **inoperable IIAb**



extensive 4 cm 0

RR
preanesthesia: 150/100 mm Hg
5': 140/90
10': 130/80
postoperation: 130/80

pt 162
pt

kano mdg
total circumferential trauma; second fistula

vfv 4652
vfv 3705
rvf aagaa

u m r (kano city)

female

30 yr

09.07.11

surgeon: kees waaldijk

vfv 3773/3969

assistant: binta musa

diagnosis: PIV (0 alive), minute < 0.1 cm 0 urethrovesicovaginal fistula with distal **obliterated** neourethra type **IIBb**, leaking urine for 4 mth that started immediately following obstructed last labor ("miscarriage") x 1 days, at home sb male, married 17 yr ago post(menarche 3 mt earlier), still living with husband, normal menstruation, drop foot R (grade 4-5) and L (grade 4-5), **healed** 0.5 cm 0 proximal pvw at cervix (tusa pv for 1 mth), no yankan gishiri, eclampsia delivery I; normal ap diameter/pubis arch 85°, ar pos, **major** pc_ic_ic + io muscle + atf/atl loss, pcf connected, moderate vagina shortening, operated 26/2-05 (mmsh_unfpa_0145_sa obesity ++ "euo"/f 1.5 cm, f/c 3 cm, i/v8 cm cervix fixed onto i spine R 148 cm

operation: disobliteration + uvvf-repair **minimum surgery**

duration: 20 min

healing 85% continence 60%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

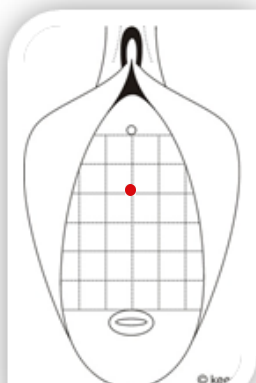
disobliteration by stab incision, transverse incision thru fistula, minimal sharp dissection tension-free transverse closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18 with transverse avw adaptation, check on hemostasis, skin closure; free urine flow, euo/bw 8 cm, anterior elevation, euo/b 1.6 cm

moderate bladder capacity (longitudinal diameter 8-1.6 = 6.5 cm)

poor position of uv-junction **fixed against** caudad third of symphysis

normal-width 1.5 cm poor-quality urethra_euo in anatomic position

the **problem: continuous pull/traction by fixed cervix**



minute < 0.1 cm 0

RR
preanesthesia: 140/90 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

total circumferential trauma

h d r (kano city)

female

31 yr

09.07.11

surgeon: dr idris suleiman abubakar

assistant: hafsat ibrahim

diagnosis: PI (0 alive), \pm 2 cm 0 rectovaginal fistula type **Ila**, **extensive** 4 cm 0 urethrovesicovaginal fistula type **IIBb**, passing stools pv/leaking urine for 16 yr which started immediately following obstructed labor for 2 days, in hospital mmsb female, married 18 yr ago post(menarche 1 mth earlier) still living with husband, no menstruation since, bilateral drop for 2 mth foot R (grade 4) and L (grade 5), no yankan gishiri, eclampsia yes; ?ap dia meter?/normal pubic arch 85°, ar pos, severe stenosis(shortening, operated 1x (rano), cervix not identified, vault fixed a/f 3 cm, f/v 0 cm 149 cm

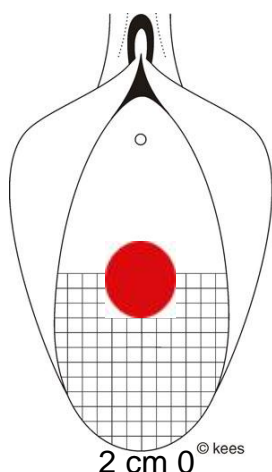
operation: rvf-repair

duration: 30 min

healing 90% continence 90%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

episiotomy R along rvf edge, incision at fistula edge, sharp dissection, tension-free transverse rectum closure by double layer of inverting interrupted/continuous serafit, pvw adaptation by 2x everting seralon, check on hemostasis, episiotomy closure



RR
 preanesthesia: 130/90 mm Hg
 5': 130/80
 10': 130/80
 postoperation: 130/80

anteriobilateral trauma; second obstetric fistula

h a a t (kano)

female

18 yr

09.07.11

surgeon: dr idris suleiman abubakar

assistant: yusif abdullahi dannafada

diagnosis: PIII (0 alive), \pm 1 cm 0 urethrovesicovaginal fistula type **IIAb** at R, leaking urine for 4 mth which started immediately following obstructed last labor ("miscarriage" at 5 mth) for 1 day, at home sb male, married 5 yr ago post (menarche 2 mth earlier), not living with husband, normal menstruation, no drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no eclampsia; ?ap diameter?/normal pubic arch 85°, ar pos, cervix fixed towards l spine L, severe vagina shortening, successful repair delivery II (mmsh), bilateral atf/atl + pc_iloc_iscm loss
euo/f 3 cm, f/c 1 cm, i/v 5 cm 155 cm

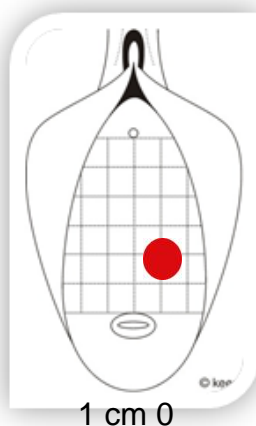
operation: uvvf-repair

duration: 30 min

healing 90% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

episiotomy R, transverse incision thru/at fistula edge, sharp dissection, tension-free transverse bladder/urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 8 cm, good anterior elevation, euo/b 2.5 cm
moderate bladder capacity (longitudinal diameter 8-2.5 = 5.5 cm)
good position of uv-junction **against** middle third of symphysis
normal-width 2.5 cm good-quality urethra_euo in anatomic position



	RR
preanesthesia:	120/80 mm Hg
5':	120/70
10':	120/70
postoperation:	120/70

pt 165

katsina mdg
anterior trauma

cath 1365

s h k (katsina)

female

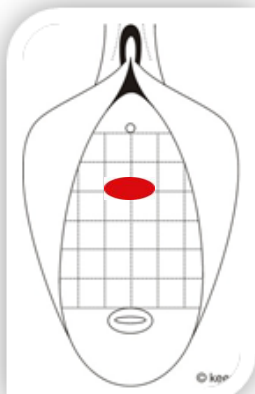
27 yr

03.07.11

diagnosis: PVI (2 alive), \pm 1.5x1 cm transverse **necrotic** urethrovesicovaginal fistula type **IIAa** midline, **leaking urine for 21 days** which started immediately following obstructed last labor for 2 days, in hospital live male, married 15 yr ago pre(menarche 9 mth later), still living with husband, no menstruation, drop foot R (grade 4) and L (grade 2), no rvf, no yankan gishiri, eclampsia yes; normal ap diameter/pubis arch 85°, ar pos
euo/f 2 cm, f/c 4 cm 150.0 cm

03.07.11 foley ch 18; free urine flow, euo/bw 11 cm, moderate anterior elevation, euo/b 1.5 cm
normal bladder capacity (longitudinal diameter 11-1.5 = 9.5 cm)
poor position of uv-junction **against** caudad third of symphysis
normal-width 1.5 cm good-quality urethra_euo in anatomic position
probably it will heal

10.07.11 not leaking at all insp/ still necrosis



transverse 1.5x1 cm

pt 166

katsina mdg
total circumferential trauma

cath 1366
rvf

d l d (katsina)

female

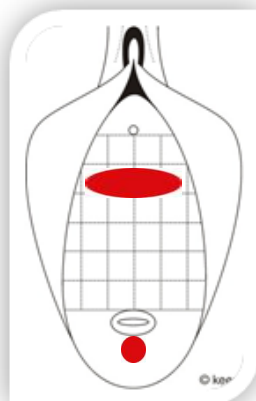
26 yr

07.07.11

diagnosis: PI (0 alive), transverse \pm 3x1 cm **necrotic** urethrovesicovaginal fistula type **IIAb**, \pm 2 cm 0 proximal rectovaginal fistula midline, **leaking urine/ passing stools pv for 14 days** that started immediately after obstructed labor for 3 days, in hospital sb female, married 13 yr ago pre(menarche 1 mth later), not living with husband, no menstruation, drop foot R (grade 3-4) and L (grade 3-4), no yankan gishiri, eclampsia yes; normal ap dia meter/**wide** pubic arch 90°, ar pos, total episiotomy L breakdown euo/f 1.5 cm, f/c 4 cm obesity ++ 158.0 cm

07.07.01 foley ch 18; free urine flow, euo/bw 14 cm, good anterior elevation and euo/b 1.5 cm
normal bladder capacity (longitudinal diameter 14-1.5 = 12.5 cm)
poor position of uv-junction **against** caudad third of symphysis
normal-width 1.5 cm poor-quality urethra_euo in anatomic position
will it heal with this circumferential trauma

10.07.11 not leaking at all insp/ idem



3x1 cm

pt 167

katsina mdg
total circumferential trauma
state-of-of-the-art repair

vvf 8118
rvf

g i b k h (katsina)

female

15 yr

10.07.11

surgeon: kees waaldijk

assistant: kabir lawal

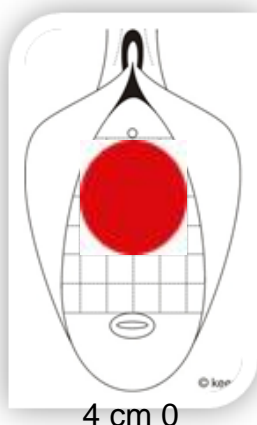
diagnosis: PI (0 alive), \pm 4 cm 0 urethrovesicovaginal fistula type **IIBb** with circumferential defect and anterior bladder fixed to cephalad symphysis, **leaking urine for 39 days** which started immediately following obstructed labor for 1 day, in hospital sb male, married 3 yr ago pre(menarche 8 mth later), not living with husband, no menstruation, drop foot R (grade 2-3) and L (grade 3), healed 2 cm proximal midline pvw_cervix trauma (never tusa pv), no rvf, no yankan gishiri, no eclampsia; normal ap diameter/wide pubic arch 90°, ar pos, bilateral atf/atl + pc_ilc_iscm loss, cervix "mobile" euo/f 0.5 cm, f/c 2 cm, ab/au 3 cm, i/v 12 cm 150.0 cm

operation: circumferential uvvf-repair + bilateral pcf refixation **first stage minimum**

duration: 40 min healing 95% continence 10%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

episiotomy L, both ureters identified but far away from the edge, transverse incision thru fistula, sharp circumferential dissection, advancement/caudad fixation of anterior bladder onto symphysis/"urethra", tension-free circumferential uvvf-repair by end-to-end vesicourethrostomy by single layer of inverting serafit, bilateral fixation of pc fascia onto paraurethra_euo atf/symphysis by 2x serafit each side, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw/avw-cervix adaptation by 2x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 13 cm, good anterior elevation, euo/b 1.2 cm (**compression**)
normal bladder capacity (longitudinal diameter 13-1.2 = 12 cm)
poor position of uv-junction **fixed against** caudad third of symphysis
normal-width 0.5 cm poor-quality urethra_euo in anatomic position
if necessary for continent urethra as **second stage**



RR
preanesthesia: 140/90 mm Hg
5': 130/80
10': 120/70
postoperation: 120/70

pt 168

katsina mdg

vvf 8119

extensive anteriopilateral + iatrogenic trauma

s s b (sokoto)

female

46 yr

10.07.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PIV (0 alive), **severely mutilated extensive** ± 4 cm 0 urethrovesicovaginal fistula with circumferential defect type **IIBb**, leaking urine for 30 yr that started immediately following obstructed first labor for 3 days, in hospital sb female, married 35 yr ago pre(menarche 2 yr later), still living with 2nd husband, normal menstruation up till now, bilateral drop foot for 2 mth R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no h/ö eclampsia; normal ap diameter/pubis arch 85°, ar pos, bilateral **major** atf/atl + pc_io_ilc_iscm loss, **mutilated** cervix fixed no canal identified, operated at least 10x by 7 different surgeons

euo/f 0.5 cm, f/c 0 cm, ab/au 1 cm, i/v 12 cm

155.0 cm

operation: **ps-like** uvvf-repair

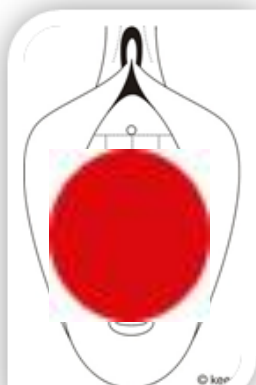
last resort final

duration: 25 min

healing 70% continence 5%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

re-episiotomy L, incision at fistula edge thru cervix remnants,, minimal sharp dissection, **under some tension** transverse avw adaptation by 2x everting seralon, triple fixation of foley ch 18, check on hemostasis, skin closure; free urine flow, euo/bw 7 cm, good anterior elevation, euo/b 1 cm pat **not** cooperative; not drinking, no defecation etc moderate bladder capacity (longitudinal diameter 7-1 = 6 cm) poor position of uv-junction **fixed against** caudad third of symphysis deformed 1 cm poor-quality urethra_euo posteriorly drawn inside



mutilated 4 cm 0

RR
preanesthesia: 140/90 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

pt 169

katsina mdg

vvf 8120

anterior/posterior + iatrogenic trauma; urge ++

rvf

m a g (sokoto)

female

20 yr

10.07.11

surgeon: kees waaldijk

assistant: kabir lawal

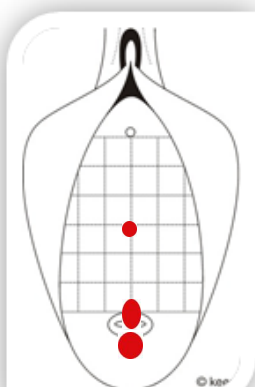
diagnosis: PII (0 alive), **mutilated multiple** ± 0.1 cm 0 urethrovesicovaginal fistula type **IIAa** midline within repair scar type and ± 0.1 cm 0 tah-cs-vvf midline, ± 3 cm 0 proximal midline rectzovaginal fistula type **Ic** fixed onto sacrum, leaking urine/passing stools pv for 4 yr which started immediately following tah-cs bco obstructed last labor for 3 days, sb male, married 8 yr ago pre(menarche 1 yr later), not living with husband, no menstruation since, bilateral drop foot for 2 mth R (grade 4-5) and L (grade 5), no yan kan gishiri, eclampsia yes; normal ap diameter/pubic arch 85°, ar pos, vault fixed midline onto sacrum, operated 1x (mawch_nakaka) euo/f 3 cm, f/f 3 cm, f/""c"" 0 cm, i/v 15 cm 156 cm

operation: **complicated** uvvf/vvf-repair + bilateralfascia fixation

duration: 50 min healing 75% continence 90%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

episiotomy L, transverse incision thru fistula/repair scar, sharp dissection whereby bladder further traumatized, then vvf noted, further dissection up to vvf, tension-free longitudinal bladder closure of 1.5x0.5 cm longitudinal defect by single layer of inverting serafit, ?tension-free? transverse bladder/urethra closure + bilateral fixation of pcf to paraurethra atf by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 14 cm, good anterior elevation, euo/b 2.8 cm **problem: strange mutilation due to both cs + repair**
 normal bladder capacity (longitudinal diameter 14-2.8 = 11 cm)
 good position of uv-junction **against** middle third of symphysis
 normal-width 3 cm good-quality urethra_euo in anatomic position



mutilated multiple fistulas

RR
 preanesthesia: 120/70 mm Hg
 5': 110/70
 10': 110/70
 postoperation: 110/70

pt 170

katsina mdg
total circumferential trauma rvf

vvf 8121
cath 1348

f u k (katsina)

female

14 yr

10.07.11

surgeon: kees waaldijk

assistant: kabir lawal

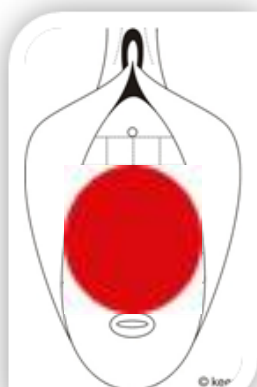
diagnosis: PI (0 alive), \pm 4 cm 0 rethrovaginal fistula type **IIBb** with almost circumferential defect (only anterior 1 cm bridge), **leaking urine for 77 days** which started immediately following obstructed labor for 2 days, in hospital sb male, married 1 yr ago pre(menarche 2 mth later), not living with husband, no menstruation, drop foot R (grade 3-4) and L (grade 3-4), **scarred** whole pvw trauma but no rvf, no yankan gishiri, yes eclampsia; normal ap diameter/pubis arch 85°, ar pos **++ R, flatus incontinence, no** saddle anesthesia, slightly pos L, healed epi, bilateral atf/atl + pc_iloc loss, cervix fixed slightly at R, moderate shortening
euo/f 1 cm, f/c 0 cm, ab/au xx cm, i/v 8 151.0 cm

operation: ureters, 4/5 circumferential uvvf-repair/pcf refixation **first stage minimum**

duration: 40 min healing 90% continence 75%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

episiotomy L, bilateral ureter catheterization for 20 cm, incision at fistula edge, sharp circumferential dissection, advancement/caudad fixation of anterior bladder onto symphysis/urethra, tension-free circumferential uvvf-repair by end-to-end vesicourethroscopy by single layer of inverting serafit, bilateral fixation of pc fascia/bladder peritoneum onto paraurethra_euo atf/symphysis by 2x serafit each side, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw/cervix approximation by 2x everting seralon, check on hemostasis, episiotomy closure; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 1.6 cm (**compression**) normal bladder capacity (longitudinal diameter 12-1.6 = 10.5 cm) poor position of uv-junction **fixed against** caudad third of symphysis normal-width 1.5 cm poor-quality urethra_euo in anatomic position



extensive 4 cm 0

RR
preanesthesia: 140/90 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

pt 171

katsina mdg
anterior trauma

cath 1367

m m m (katsina)

female

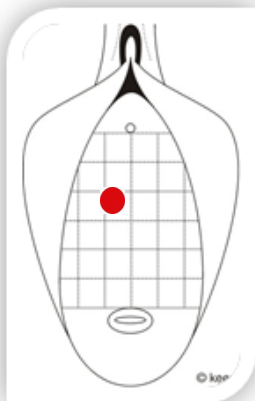
43 yr

09.07.11

diagnosis: PXI (7 alive), \pm 1.5 cm 0 **black-necrotic** urethrovesicovaginal fistula type **IIAa** slightly at R, **leaking urine for 17 days** which started immediately following cs bco obstructed last labor for 1 day, sb male, married 26 yr ago post(menarche 4 yr earlier), still living with husband, no menstruation, drop foot R (grade 4) and L (grade 4), no rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/pubis arch 85°, ar pos, cervix retracted/ fixed midline, obesity ++
 euo/f 2.5 cm, f/c 4 cm 162.0 cm

09.07.11 suprapubic mass, avw bulging into vagina, bladder overdistended (euo/bw 22 cm), good anterior elevation after draining > 2,000 ml urine,, euo/b 1.5 cm foley ch 18; free urine flow
increased bladder capacity (longitudinal diameter 22-1.5 = 20.5 cm, **an atonic bladder**)
 poor position of uv-junction **against** caudad third of symphysis
 normal-width 1.5 cm good-quality urethra_euo in anatomic position
 probably it will heal since necrosis not too deep

10.07.11 not leaking at all



1.5 cm 0

pt 172

katsina mdg
total circumferential trauma

vvf 8122
rvf

h l k (katsina)

female

16 yr

11.07.11

surgeon: kees waaldijk

assistant: kabir lawal

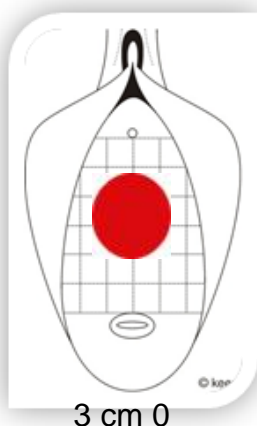
diagnosis: PII (0 alive), \pm 3 cm 0 urethrovesicovaginal fistula type **IIAb** with circumferential defect, leaking urine for 5 mth that started immediately following cs bco obstructed last labor for 2 days, sb female, married 3 yr ago post (menarche 3 mth earlier), not living with husband, normal menstruation, drop foot R (grade 2-3) and L (grade 3), healed 2 cm 0 proximal midline pvw/cervix trauma (tusa pv for 1 mth), no rvf, no yankan gishiri, eclampsia no; normal ap diameter/wide pubic arch 90°, ar pos, bilateral atf/atf + pc_ ilc_iscm loss + ssl_pm trauma, cervix fixed midline, lpl stricture
euo/f 1.5 cm, f/c 2 cm, ab/au 2 cm, i/v 11 cm 154.5 cm

operation: circumferential uvvf-repair + bilateral pcf refixation

duration: 45 min (**step-by-step teaching**) healing 95% continence 85%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

episiotomy L with severing of stricture, transverse incision thru/at fistula edge, sharp circumferential dissection, advancement/caudad fixation of anterior bladder onto symphysis/urethra, tension-free circumferential uvvf-repair by end-to-end vesicourethrostomy by single layer of inverting serafit, bilateral fixation of pc fascia onto paraurethra_euo atf/symphysis by 2x serafit each side, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw/avw-cervix adaptation by 2x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 11 cm, good anterior elevation, euo/b 1.0 cm
normal bladder capacity (longitudinal diameter 11-1 = 10 cm)
poor position of uv-junction **fixed against** caudad third of symphysis
normal-width 1 cm good-quality urethra_euo in anatomic position



RR
preanesthesia: 140/90 mm Hg
5': 130/80
10': 120/70
postoperation: 120/70

pt 173

katsina mdg
total circumferential trauma
nicely healed

vvf 8123/8050
cath 1339
rvf

k y k (katsina)

female

17 yr

11.07.11

surgeon: kees waaldijk

assistant: kabir lawal

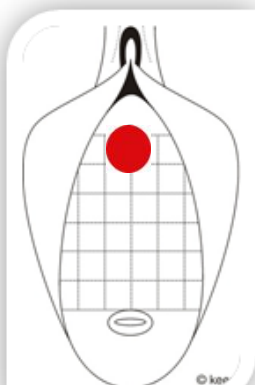
diagnosis: PI (0 alive), total post **nicely healed extensive IIBb** urine intrinsic-stress incontinence grade III, leaking urine whilst lying/sitting/standing/walking + **no** spontaneous micturition following circum repair 10.5.11, not living with husband, no menstruation, drop foot R (grade 3-4) and L (grade 4-5); normal ap diameter/pubis arch 85°, ar pos, bilateral atf /atl + pc_io_ilc_iscm loss + ssl_pm trauma, cervix fixed to i spine R, moderate stenosis/shortening euo/c 4 cm
wide open urethra_euo posteriorly pulled inside by scarring/fibrosis euo/bw 11 cm, good elevation, euo/b 0.3 cm, i/v 6 cm 157.0 cm

operation: distal urethra reconstruction as **minimum surgery 2nd stage**

duration: 15 min (**step-by-step teaching**) healing 95% continence 70%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

L re-episiotomy, U incision at euo edge, sharp dissection, tension-free longitudinal distal urethra reconstruction over 2 cm by single layer of inverting serafit, euo/b 2.2 cm, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, longitudinal avw Y adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 2.2 cm
normal bladder capacity (longitudinal diameter 12-2.2 = 10 cm)
good position of uv-junction **against** middle third of symphysis
normal-width 2 cm **good-quality** urethra_euo in anatomic position
the **problem: extensive obstetric trauma resulting into scarring/fibrosis**
since good-quality urethra tissue she may become totally continent (physiologic stress)



wide open urethra_euo

RR
preanesthesia: 130/80 mm Hg
5': 120/70
10': 120/70
postoperation: 120/70

pt 173a

katsina

cath 1339

**extensive total circumferential trauma
noma, fournier gangrene of vulva/labia**

k y k (katsina)

female

17 yr

02.03.11

diagnosis: PI (0 alive), \pm 4 cm 0 urethrovesicovaginal fistula type **IIBb**, 4x2 cm distal **necrotic** pvw, **leaking urine/passing flatus pv for 4 days** which started immediately following obstructed labor for 2 days, in hospital sb female, married 5 yr ago pre(menarche 1 yr later), not living with husband, no menstruation, drop foot R (grade 1-2) and L (grade 4), no rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/pubis arch 85°, ar **neg**, **saddle hypesthesia**, flatus incontinence, anus closed
extensive vulva/bilateral labia edema/necrosis
euo/f 1 cm, f/c 0 cm, a/pvwn 3 cm 157.0 cm

02.03.11 foley ch 18; free urine flow, euo/bw 13 cm, good anterior elevation and euo/b 1 cm
normal bladder capacity (longitudinal diameter 13-1 = 12 cm)
poor position of uv-junction **against** caudad third symphysis
normal-with 1 cm good-quality urethra_euo pulled inside

14.03.11 leaking \pm **documentation of extensive bilateral labia loss 14.03**

what a detergent can do to necrotic/infected lesions documentation 10.05

10.05.11 **operation: circ uvvf-repair pt 6336 vvf 8050**

11.07.11 **operation: distal urethra 2nd stage vvf 8123**

pt 174

katsina mdg
anteriobilateral trauma

vvf 8124

s i y (katsina)

female

16 yr

11.07.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PII (0 alive), \pm 3 cm 0 urethrovesicovaginal fistula type **IIAa** midline/L with bladder base prolapse partial/anterior cervix loss, leaking urine for 7 mth which started immediately following cs bco obstructed last labor for 1 day, sb male, married 3 yr ago post(menarche 5 mth earlier), not living with husband, normal menstrua tion, drop foot R (grade 3) and L (grade 2), no rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/wide pubic arch 90°, ar pos, cervix fixed towards i spine L, bilateral iscm + ssl_pm trauma L > R, proximal circular stricture
euo/f 3.5 cm, f/c 0 cm, i/v 10 cm 151.0 cm

operation: uvvf-repair

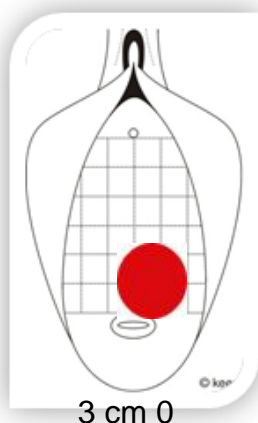
pat **not** drinking

duration: 45 min (**step-by-step teaching**)

healing 95% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

episiotomy L, ureters **not** identified (not drinking), incision at fistula edge, sharp dis section, tension-free transverse bladder_cervix/urethra closure by single layer of invert ing serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw/cervix adaptation by 2x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 2.8 cm normal bladder capacity (longitudinal diameter 12-2.8 = 9 cm)
good position of uv-junction **against** middle third of symphysis
normal-width 3 cm good-quality urethra_euo in anatomic position



RR
preanesthesia: 130/80 mm Hg
5': 120/70
10': 120/70
postoperation: 120/70

pt 175

katsina mdg

vuf 8125/7816/7913

post IIAb incontinence; minute fistula midline; looks like operated again

h a r t (katsina)

female

16 yr

28.07.10

surgeon: kees waaldijk

assistant: kabir lawal

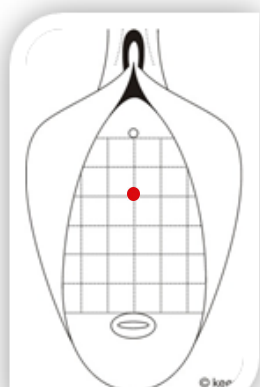
diagnosis: PI (0 alive), total post **IIAb** urine intrinsic_stress incontinence grade III, leaking urine whilst lying/ sitting/standing/walking + **no** spontaneous mic tion, minute < 0.1 cm 0 fistula midline within **scar/mutilation** tissue after multiple repairs 10.5 to 28.7.10, not living with husband, normal menstru ation, drop foot R (grade 5) and L (grade 5); normal ap diameter/pubic arch 85°, ar pos, atf/atl + pc_iloc_iscm loss at R, slight lpl stricture, cervix "fixed" midline, obesity ++, "open" urethra_euo slightly posteriorly drawn inside
euo/c 6 cm
euo/f 12 cm, good elevation, f/c 4 cm, i/v 12 cm 145.0cm

operation: excision of scar/mutilation tissue + uvvf-repair + pcf fixation

duration: 45 min healing 95% continence 85%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

re-episiotomy L, transverse incision at 2 cm from euo thru repair scar, sharp dissection, excision of all scar/mutilation tissue ++, fistula detected by gv, tension-free transverse closure by 1x inverting serafit cross with normalization of euo, bilateral fixation of pc fascia onto para-euo atf by 1x serafit each side, **no** urine thru suture line/euo on rest/ cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis, episiotomy closure; free urine flow, euo/bw 13 cm, good anterior elevation, euo/b 2.2 cm
??what exactly happened??
normal bladder capacity (longitudinal diameter 13-2.2 = 11 cm)
good position of uv-junction **against** middle third of symphysis
normal-width 2 cm good-quality urethra_euo in anatomic position



minute < 0.1 cm 0

RR
preanesthesia: 140/80 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

extensive anteriopilateral + iatrogenic trauma

a i m (katsina)

female

27 yr

12.07.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PVI (2 alive), **mutilated extensive** \pm 4 cm 0 urethrovesicovaginal fistula with circumferential defect type **II Bb**, leaking urine for 8 mth which started immediately following cs 16.11.10 bco obstructed labor for 2 days, sb female, married 13 yr ago post(menarche 1 yr earlier), not living at husband, normal menstruation, drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/pubis arch 85°, ar pos, bilateral atf/atl + pc_ilc_iscm loss, cervix "fixed" midline, operated 5.6.11 (mdg 016), **nb ureter fistula L** outside bladder laterally from cervix euo/f 1 cm, f/c 0 cm, ab/au 0.2 cm, i/v 12 cm 160.0 cm

operation: repositioning/draining L ureter into bladder + bilateral **ps** as **first stage**

duration: 40 min

healing xx continece xx

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

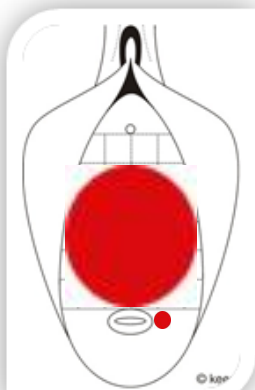
episiotomy L, catheterization L ureter for 20 cm, incision at fistula edge/thru "anterior cervix" and outside L ureter opening, sharp dissection, since anterior cervix fixed primary suturing (with metal sound inside cervix canal/uterine cavity) by transverse adaptation of bilateral cervix (so that L ureter will drain into bladder) by 4x everting seralon leaving it completely open at midline, ballooning of foley ch 18, check on hemostasis, skin closure pack; free urine flow, euo/bw 7 cm, good anterior elevation, euo/b 2.5 cm (compression)

small bladder capacity (longitudinal diameter 7-2.5 = 4.5 cm; directly only 3 cm)

poor position of uv-junction **fixed against** caudad third of symphysis

normal-width 1 cm poor-quality urethra_euo in anatomic position

the **only way to close the fistula** is by using the mobile posterior cervix; however this has to be discussed with the patient since then she will menstruate thru euo; as well continence cannot be guaranteed



extensive 4 cm 0
ureter fistula L

	RR
preanesthesia:	140/100 mm Hg
5':	140/90
10':	130/80
postoperation:	130/80

pt 177

katsina mdg
anterior trauma

cath 1368

a m b (katsina)

female

32 yr

12.07.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PIX (4 alive), overflow incontinence due to long-standing atonic bladder, leaking urine for 7 mth which started immediately following cs bco obstructed last labor for 2 days, live female, married 20 yr ago pre(men arche 1 yr later), still living at husband, normal menstruation, no drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/pubis arch 85°, ar pos, cervix fixed onto i spine L **wide open** urethra_euo with overflow obesity ++ 150.0 cm

operation: dye test

no s/o (ureter) fistula

duration: 10 min

healing

continence

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

150 ml dye: **no** leakage/**no** clear urine in vagina avw bulging into vagina
euo/bw 17 cm, moderate elevation after draining, euo/b 1.0 cm
increased bladder capacity (longitudinal diameter 17-1.0 = 16 cm)
poor position of uv-junction **against** caudad third of symphysis
normal-width 1 cm medium-quality urethra_euo lsightly posteriorly pulled inside
leave catheter for 8-10 wk

RR
preanesthesia: 130/80 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

pt 178
pt

katsina mdg
still living with husband

vvf 8127/4522/6874/7711
vfv 3582/3676

u m m (katsina)

female

27 yr

18.10.09

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PII (0 alive), another \pm 4x2x1 cm rough-surface bladder stone now with 1.5x0.5 transverse fistula (**?how?**) at 2.5 cm from euo, still living at husband, normal menstruation, drop foot R (grade 5) and L (grade 5); normal ap diameter/pubis arch 85°, ar pos, severe vagina shortening i/v 3 cm 160.0 cm

operation: transfistula stone removal + approximation

final by all means

duration: 10 min

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse enlargement of fistula, 4x2x1 cm bladder stone removal in one piece, flushing debris out of bladder, avw" cervix" approximation by 3x everting seral on, ballooning of foley ch 18; free urine flow, euo/bw 10 cm, good elevation, euo/b 2.4 cm normal bladder capacity (longitudinal diameter 10-2.4 = 7.5 cm) good position of uv-junction **against** middle third of symphysis normal-width 2.5 cm good-quality urethra_euo in anatomic position surgically nothing can be done anymore pat no complying with bladder drill normal-width normal-length 2.5 cm good quality urethra_euo fixed in anatomic position

only bladder drill under supervision

RR
preanesthesia: 140/80 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

pt 179

katsina mdg

vvf 8128/5121

rvf 1017

r a b-k (kebbi)

female

26 yr

12.07.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PI (0 alive), total post **extensive IIBa** urine intrinsic_stress incontinence grade III, leaking urine whilst lying/sitting/standing/walking + spontaneous miction following successful urethra/avw reconstruction 6.6.01, not living with husband, no menstruation, no (h/o) drop foot R (grade 5) and L (grade 5) normal ap diameter/wide pubic arch 90, ar pos, cervix not identified euo/v 4 cm **open** urethra_euo posteriorly pulled inside sphincter ani nicely healed operated 1x (sokoto_id) euo/bw 14 cm, good elevation, euo/b 2.1 cm, i/v 5 cm 150.0 cm

operation: urethra-euo rhaphy + para-euo fixation

last resort final

duration: 15 min

healing 95% continence 75%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

obesity +++

semicircular incision at euo with bilateral longitudinal extensions up to vault, sharp dis section, medium-quality tissue, urethra_euo rhaphy using paraurethra tissue over 2 cm by serafit, bilateral fixation of "pc fascia" onto para-euo atf by 1x serafit each side, now euo/b 2.2 cm, **no** urine thru euo on rest/cough/pressure, triple fixation of foley ch 18, avw 2-point fixation onto para-euo symphysis by 1x everting sedralon each side; free urine flow, euo/bw 14 cm, good elastic anterior elevation, euo/b 2.2 cm normal bladder capacity (longitudinal diameter 14-2.2 = 12 cm) good position of UV-junction **against** middle third of symphysis normal-width 2 cm medium-quality urethra_euo in anatomic position

RR

preanesthesia: 130/80 mm Hg

5': 130/80

10': 130/80

postoperation: 130/80

traumatic impalement fistula

f m m (katsina)

female

67 yr

12.07.11

surgeon: dr idris halliru

assistant: gambo lawal

diagnosis: PXII (8 alive), \pm 0.1 cm 0 vesicovaginal fistula type I at midline anterior cervix lip, leaking urine for 3 yr which started immediately following upon piece of wood, married 55 yr ago pre(menarche 1 yr later), not living with husband, menopause 20 yr ago, drop foot R (grade 5) and L (grade 5), no rvf, yankan gishiri by herself during delivery VII, no h/o eclampsia; normal ap diameter/pubis arch 85°, ar pos, 2° cervix prolapse up to vulva
euo/f 6 cm, f/c 0 cm, i/v 11 cm 150.5 cm

operation: vvf-repair

duration: 20 min

healing 95° continence 95%

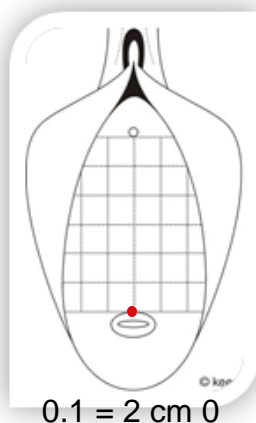
anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision thru fistula, sharp dissection, now 2 cm 0 bladder defect, tension-free transverse bladder closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, ballooning of foley ch 18, transverse avw/cervix adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 12 cm, poor anterior elevation, euo/b 1.8 cm

normal bladder capacity (longitudinal diameter 12-1.8 = 10 cm)

poor position of uv-junction **against** caudad third of symphysis

normal-width 2 cm good-quality urethra_euo in anatomic position



RR
preanesthesia: 150/90 mm Hg
5': 140/90
10': 130/80
postoperation: 130/80

pt 181
pt 182

katsina mdg
anteriorbilateral + cut-thru trauma

vvf 8129
rvf 1028

I g y-m (katsina) female 27 yr 13.07.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PV (4 alive), **extensive** ± 4 cm 0 urethrovesicovaginal fistula type **IIAb/Bb** with circumferential defect type/whole bladder prolapse, sphincter ani rupture with 1.5 cm longitudinal ano-rectum trauma, leaking urine/stool/flatus incontinence for 8 mth which started immediately following ?tah?-cs bco obstructed last labor for 1 day, sb male, married 14 yr ago pre(menarche 2 mth later), not living with husband, no menstruation, drop foot R (grade 4-5) and L (grade 4-5), no yankan gishiri, no h/o eclampsia; normal ap diameter/**wide** pubic arch 95°, ar pos, bilateral atf/atl + pc_ilc_iscm loss, cervix not identified/vault fixed, moderate vagina shortening euo/f 1.5 cm, f/v 0 cm, ab/au 0.3 cm, a/f 0 cm, i/v 5 cm 152.0 cm

operation: ureters, uvvf-“repair” + ano-rectum/sphincter ani/perineal body repair

duration: 50 min healing **u_s 75_95%** continence **u_s 70_95%**

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

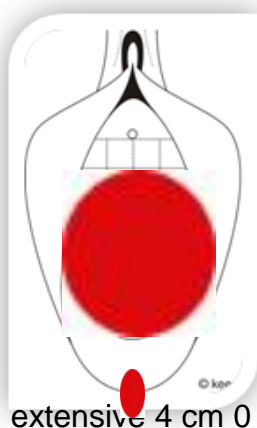
difficult bladder reduction, bilateral ureter catheterization for 20 cm, incision at fistula edge, minimal sharp dissection, **under some tension** transverse bladder/symphysis/urethra closure by single layer of inverting serafit, on cough bladder tears out, the only thing possible is transverse avw/pvw adaptation (with inversion of bladder tear) by 4x everting seralon, triple fixation of foley ch 18; free urine flow, euo/bw 9 cm, good anterior elevation, euo/b 1.3 cm

normal bladder capacity (longitudinal diameter 9-1.3 = 7.5 cm)

good position of uv-junction **fixed against** middle third of symphysis since

open 1.5 cm good-quality urethra_euo posteriorly pulled inside by vault

incision at pvw edge with freshening of sphincter ani ends, minimal sharp dissection, longitudinal ano-rectum closure with adaptation_rhaphy of internal sphincter over 2 cm up to anocutaneous junction (with repositioning of anterior anus) by double layer of inverting interrupted/continuous serafit, inner ring of external sphincter adapted, end-to-end external sphincter ani reconstruction by 2x serafit, perineal body repair with (in)direct re-union of transversus perinei muscles and (in)direct posterior re-union of bulbocavernosus muscles by 2x serafit, perineum well adapted with anus in anatomic position, check on hemostasis



RR
preanesthesia: 120/70 mm Hg
5': 120/70
10': 120/70
postoperation: 120/70

pt 182
pt 181

katsina mdg
anteriorbilateral + cut-thru trauma

rvf 1028
vfv 8129

I g y-m (katsina) female 27 yr 13.07.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PV (4 alive), **extensive** ± 4 cm 0 urethrovesicovaginal fistula type **IIAb/Bb** with circumferential defect type/whole bladder prolapse, sphincter ani rupture with 1.5 cm longitudinal ano-rectum trauma, leaking urine/stool/flatus incontinence for 8 mth which started immediately following ?tah?-cs bco obstructed last labor for 1 day, sb male, married 14 yr ago pre(menarche 2 mth later), not living with husband, no menstruation, drop foot R (grade 4-5) and L (grade 4-5), no yankan gishiri, no h/o eclampsia; normal ap diameter/**wide** pubic arch 95°, ar pos, bilateral atf/atl + pc_ilc_iscm loss, cervix not identified/vault fixed, moderate vagina shortening, suturing 1x euo/f 1.5 cm, f/v 0 cm, ab/au 0.3 cm, a/f 0 cm, i/v 5 cm 152.0 cm

operation: ureters, uvvf-“repair” + ano-rectum/sphincter ani/perineal body repair

duration: 50 min healing **u_s 75_95%** continence **u_s 70_95%**

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

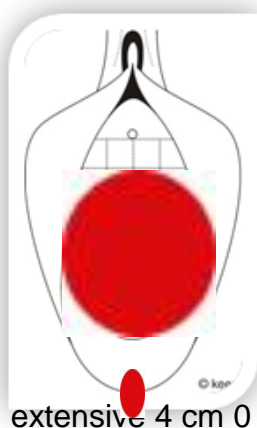
difficult bladder reduction, bilateral ureter catheterization for 20 cm, incision at fistula edge, minimal sharp dissection, **under some tension** transverse bladder/symphysis/urethra closure by single layer of inverting serafit, on cough bladder tears out, the only thing possible is transverse avw/pvw adaptation (with inversion of bladder tear) by 4x everting seralon, triple fixation of foley ch 18; free urine flow, euo/bw 9 cm, good anterior elevation, euo/b 1.3 cm

normal bladder capacity (longitudinal diameter 9-1.3 = 7.5 cm)

good position of uv-junction **fixed against** middle third of symphysis since

open 1.5 cm good-quality urethra_euo posteriorly pulled inside by vault

incision at pvw edge with freshening of sphincter ani ends, minimal sharp dissection, longitudinal ano-rectum closure with adaptation_rhaphy of internal sphincter over 2 cm up to anocutaneous junction (with repositioning of anterior anus) by double layer of inverting interrupted/continuous serafit, inner ring of external sphincter adapted, end-to-end external sphincter ani reconstruction by 2x serafit, perineal body repair with (in)direct re-union of transversus perinei muscles and (in)direct posterior re-union of bulbocavernosus muscles by 2x serafit, perineum well adapted with anus in anatomic position, check on hemostasis



RR
preanesthesia: 120/70 mm Hg
5': 120/70
10': 120/70
postoperation: 120/70

pt 183

katsina mdg
anterior trauma

vvf 8130

w a u-d d (katsina)

female

14yr

13.07.11

surgeon: dr ganda yousnou/kees waaldijk

assistant: kabir lawal

diagnosis: PI (0 alive), \pm 0.5 cm 0 urethrovesicovaginal fistula type **IIAa** at mildine, **leaking urine for 59 days** which started immediately following obstructed labor for 1 day, at home sb male, married 1 yr ago post(menarche 3 mth earlier), not living with husband, no menstruation, drop foot R (grade 2-3) and L (grade 3), no rvf, no yankan gishiri, eclampsia yes; normal ap dia meter/wide pubic arch 95°, ar pos, cervix mobile, healing rupture L
euo/f 2 cm, f/c 4 cm, i/v 11 cm 150.0 cm

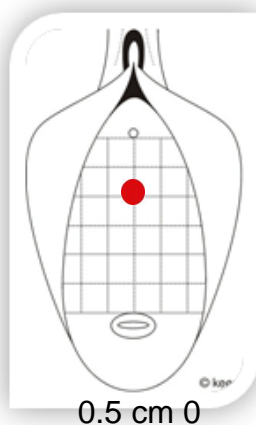
operation: uvvf-repair

duration: 40 min

healing 95% continence 90%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

re-opening "episiotomy" L, transverse incision thru/at fistula edge, sharp dissection, tension-free transverse bladder/urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 1.5 cm
normal bladder capacity (longitudinal diameter 12-1.5 = 10.5 cm)
poor position of uv-junction **against** caudad third of symphysis
normal-width 1.5 cm good-quality urethra_euo in anatomic position



	RR
preanesthesia:	140/90 mm Hg
5':	140/90
10':	130/80
postoperation:	130/80

pt 184

katsina mdg

vvf 8131

span too wide; anterior trauma; median pcf defect; sul intact

z a j (katsina)

female

16 yr

13.07.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PI (alive), total **genuine postpartum** urine intrinsic_stress incontinence grade III, leaking urine whilst lying/sitting/standing/walking + spontaneous miction for 5 mth which started immediately following obstructed labor for 14 days, in hospital live female, married 3 yr ago post(menarche 2 mth earlier), still living with husband, no menstruation, no (h/o) drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/**wide** pubic arch 95°, ar pos, cervix mobile in anatomic position, cystocele **++** **objective stress ++** obesity **++** euo/c 8 cm normal-width urethra_euo in anatomic position euo/bw 14 cm, poor elevation, euo/b 1.8 cm, i/v 13 cm 152.0 cm

operation: urethralization and pc fascia fixation

duration: 35 min (**step-by-step teaching**) healing 95% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

small epi L, transverse curved incision at 2 cm from euo parallel/within ruga folds, sharp dissection, 6x2 cm median longitudinal fascia defect from cervix up to 2 cm from euo, longitudinal repair/rhaphy of pc fascia at 2-6 cm from euo by serafit, paraurethra pcf fixation intact, now euo/b 2.7 cm, **no** urine thru euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw_pcf/symphysis_avw adaptation by 2x everting seralon, check on hemostasis, epi closure; free urine flow, euo/bw 14 cm, good elastic anterior elevation, euo/b 2.7 cm (**urethralization_compression**) normal bladder capacity (longitudinal diameter 14-2.7 = 11.5 cm) good position uv-junction **against** middle third symphysis good fascia plate good-quality pcm **no** longer cystocele normal-width 2.5 cm good-quality urethra_euo in anatomic position

RR

preanesthesia: 120/70 mm Hg

5': 120/70

10': 120/70

postoperation: 120/70

pt 185

katsina

vvf 8132

extensive total circumferential trauma

cath 1363

b d d (katsina)

female

15 yr

13.07.11

surgeon: kees waaldijk

assistant: kabir lawal

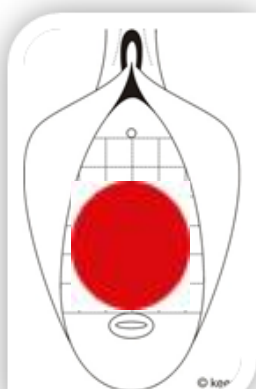
diagnosis: PI (0 alive), extensive \pm 4 cm 0 urethrovesicovaginal fistula type **IIAb** with circumferential defect at R, \pm 3 cm 0 **inflamed** proximal pvw, **leaking urine for 26 days** which started immediately following obstructed labor for 5 days, in hospital sb male, married 1.5 yr ago post(menarche 3 mth ear lier), not living with husband, no menstruation, drop foot R (grade 3-4) and L (grade 3-4), rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/pubis arch 85°, ar pos, healing episiotomy L with **no longer** stool incontinence, cervix completely fixed midline
 euo/f 1.5 cm, f/c 0 cm, a/f 6 cm, i/v 10 cm 154.0 cm

operation: bilateral ureters, 4/5 circumferential uvvf-repair + bilateral pcf refixation

duration: 40 min healing 85% continence 75%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

extending episiotomy L, incision at fistula edge, sharp 4/5 circumferential dissection, tension-free 4/5 circumferential uvvf-repair by end-to-end vesicourethrostomy by single layer of inverting serafit (**under some tension at L**), bilateral fixation of pc fascia onto paraurethra_euo atf/symphysis by 2x serafit each side, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw approximation by 2x everting seralon but there remains 4x2 transverse gap, check on hemostasis, skin closure; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 2.1 cm normal bladder capacity (longitudinal diameter 12-2.1 = 10 cm) avw will epithelize good position of uv-junction **fixed against** middle third of symphysis normal-width 1.5 cm poor-quality urethra_euo in anatomic position



extensive 4 cm 0

RR
 preanesthesia: 140/90 mm Hg
 5': 130/80
 10': 120/70
 postoperation: 120/70

pt 186

katsina mdg
anteriobilateral trauma

vvf 041

h a d (katsina)

female

25 yr

13.07.11

surgeon: dr idris halliru

assistant: gambo lawal

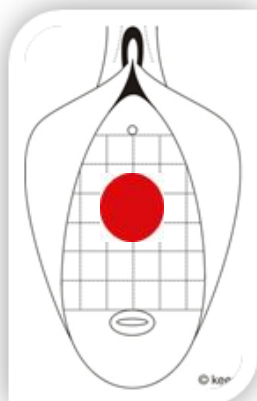
diagnosis: PVI (3 alive), \pm 3 cm 0 urethrovesicovaginal fistula with circumferential defect type **IIAb**, leaking urine for 3 mth which started immediately after cs bco obstructed last labor for 3 days, sb female, married 13 yr ago pre (menarche 8 mth later), not living with husband, no menstruation, drop foot R (grade 2) and L (grade 3), no rvf, no yankan gishiri, no eclampsia; normal ap diameter/wide pubic arch 95°, ar pos, bilateral atf/atl + pc_ilc_ iscm loss, cervix fixed
euo/f 2 cm, f/c 3 cm, ab/au 1 cm, i/v 11 cm 151.0 cm

operation: circumferential uvvf-repair + bilateral pcf refixation

duration: 40 min healing 85% continence 85%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

ureters **not** identified, incision at fistula edge, sharp circumferential dissection, advance ment/caudad fixation of anterior bladder onto symphysis/urethra, tension-free circumferential uvvf-repair by end-to-end vesicourethrostomy by single layer of inverting serafit, bilateral fixation of pc fascia onto paraurethra_euo atf/symphysis by 2x serafit each side, **no** urine thru suture line/euo on rest/cough/pressure, ballooning of foley ch 18, transverse avw adaptation by 5x everting seralon, check on hemostasis; free urine flow, euo/bw 10 cm, good anterior elevation, euo/b 1.7 cm
normal bladder capacity (longitudinal diameter 10-1.7 = 8.5 cm)
poor position of uv-junction **fixed against** caudad third of symphysis
normal-width 1.7 cm good-quality urethra_euo in anatomic position



3 cm 0

RR
preanesthesia: 130/80 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

pt 187
pt

katsina mdg
post IIAb total incontinence

vvf 042

vvf 7647/7763
vvf 5413

a b y b (adamawa)

female

25 yr

13.07.11

surgeon: dr idris halliru

assistant: gambo lawal

diagnosis: PII (0 alive), post **IIAb** total incontinence grade III, leaking whilst lying/sitting/standing/walking + spontaneous miction following multiple repairs 11.5.02 .. 25.6.09, not living with husband, normal menstruation, no (h/o) drop foot R (grade 5) and L (grade 5), no RVF, no yankan gishiri, no eclampsia; normal AP diameter/narrow pubic arch 75°, AR pos, bilateral atf/atl + pc_ilc_iscm loss, moderate vagina stenosis/shortening, proximal lpl stricture, cervix fixed at vault euo/c 3.5 cm scarring +++
euo/bw 14 cm, good elevation, euo/b 1.6 cm, i/v 8 cm 150.0 cm

operation: bilateral pcf fixation

duration: 25 min healing 95% continence 85%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transvertse incision thru previous repair scat, sharp dissection, bilateral fixation of pcf onto para-euo atf by 2x sedrafit each side, **no** urine thru suture line/euo on rest/cough/pressure, ballooning of foley ch 18, transverse avw adaptation by 2x everting seralon, check hemostasis; free urine flow, euo/bw 14 cm, good anterior elevation, euo/b 3.7 cm normal bladder capacity (longitudinal diameter 14-3.7 = 10.5 cm)
good position of uv-junction **against** middle third of symphysis
normal-width 3.5 cm medium-quality urethra_euo in anatomic position

RR
preanesthesia: 130/80 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

z u i (rép niger)

female

18 yr

14.07.11

surgeon: kees waaldijk

assistant: kabir lawal

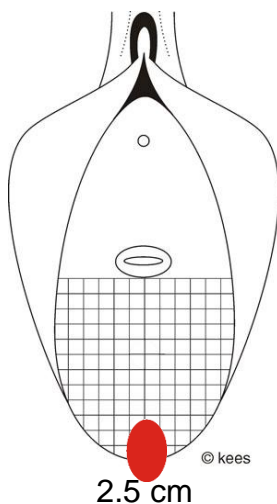
diagnosis: PI (0 alive), sphincter ani rupture with 2.5 cm longitudinal ano-rectum trauma, stool/flatus incontinence for 4 mth that started immediately following obstructed labor for 3 days, in hospital sb male, married 5 yr ago pre(men arche 5 mth later), not living with husband, normal menstruation, drop foot R (grade 5) and L (grade 5), no vvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/**wide** pubic arch 95°, ar pos, operated 1x (matamaye) a/f 0 cm, i/v 12 cm never leaking urine 157.0 cm

operation: ano-rectum closure and sphincter ani_perineal body reconstruction

duration: 25 min (**step-by-step teaching**) healing 95% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

incision at pvw edge with freshening of sphincter ani ends, minimal sharp dissection, longitudinal ano-rectum closure with adaptation_rhaphy of internal sphincter over 3 cm up to anocutaneous junction (with repositioning of anterior anus) by double layer of inverting interrupted/continuous serafit, inner ring of external sphincter adapted, end-to-end external sphincter ani reconstruction by 2x serafit, perineal body repair with (in)direct re-union of transversus perinei muscles and (in)direct posterior re-union of bulbocavernosus muscles by 2x serafit, perineum well adapted with anus in anatomic position, check on hemostasis
foley ch 18; free urine flow, euo/bw 17 cm, good elevation, euo/b 2 cm



	RR
preanesthesia:	140/90 mm Hg
5':	130/80
10':	130/80
postoperation:	120/70

pt 189

katsina mdg

vvf 8133

katsina mdg

cath 1353

anteriobilateroposteriolateral R trauma; second obstetric fistula

I s d (katsina)

female

40 yr

08.06.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PX (3 alive), \pm 2 cm 0 urethrovesicovaginal fistula type **IIAa** at midline, **leaking urine for 41 days** which started immediately following obstructed last labor for 2 days, in hospital sb female, married 28 yr ago pre(menar che 1 yr later), still living at husband, no menstruation, drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no eclampsia; normal ap diameter/pubic arch 85°, ar pos, successful repair (b/r_awal) delivery IX, transverse 5x1 cm pcf defect, cervix fixed onto i spine R, iscm loss + ssl_ pm trauma at R obesity ++ not healed by catheter euo/f 3.5 cm, f/c 1 cm, i/v 11 cm **open** urethra_euo 148.5 cm

operation: uvvf-repair + transverse fascia repair

duration: 40 min (**step-by-step teaching**) healing 95% continence 95%

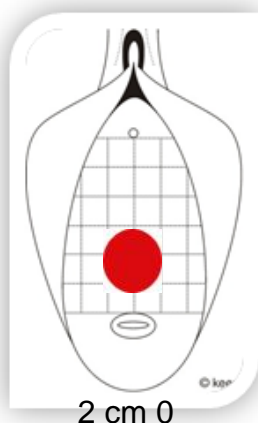
anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

episiotomy L, transverse incision thru/at fistula edge, sharp dissection, tension-free transverse fascia repair with bladder/urethra closure by single layer of inverting serafit with normalization of urethra_euo, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw/avw-cervix adaptation by 2x everting sera lon, check on hemostasis, skin closure, pack; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 1.9 cm

normal bladder capacity (longitudinal diameter 12-1.9 = 10 cm)

acceptable position of uv-junction **against** middle/caudad third of symphysis

normal-width 2 cm good-quality urethra_euo in antomic position



RR
 preanesthesia: 220/120 mm Hg
 5': 200/100
 10': 180/90
 postoperation: 160/90

pt 190

katsina mdg

vvf 8134

congenital; poor-quality pc fascia; not responding to bladder drill

f m m (katsina)

female

15 yr

14.07.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: P0, total **“genuine”** urine intrinsic_stress incontinence garde III, leaking urine whilst lying/sitting/standing/walking + spontaneous miction for 15 yr since she was born, **never** married, normal menstruation, no (h/o) drop foot R (grade 5) and L (grade 5), no vvf/rvf; normal ap diameter/pubis arch 85°, ar pos, no flatus_stool incontinence, cystocele +++/2° cervix at clinical examination, now reduced under anesthesia/lithotomy position no s/o spina bifida **wide open** urethra_euo posteriorly pulled inside euo/bw 14 cm, poor elevation, euo/b 1.2 cm, i/v 11 cm 165 cm

operation: urethralization and para-euo pcf fixation euo/c 6 cm

duration: 25 min (**step-by-step teaching**) healing 95% continence 75%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

dye/ **no** leakage, **no** clear urine urine level in accord with respiration small epi L transverse curved incision at 2 cm from euo parallel/within ruga folds, sharp dissection, longitudinal rhaphy of **poor-quality** pc fascia at 1.5-5 cm from euo by serafit (actually only proximal pcf of “good” quality, bilateral fixation of pc fascia onto para-euo atf by 1x serafit each side with normalization of urethra_euo, now euo/b 1.8 cm, **no** urine thru euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw_pcf/symphysis _avw adaptation by 2x everting seralon, check on hemostasis, epi closure; free urine flow, euo/bw 12 cm, good elastic anterior elevation, euo/b 1.8 cm (**urethralization**) normal bladder capacity (longitudinal diameter 12-1.8 = 10 cm) acceptable position uv-junction **against** middle/caudad third symphysis medium fascia plate good-quality pcm pat needs **proper counseling/instruction** normal-width 2 cm medium-quality urethra_euo in anatomic position nothing has been done against anatomy/physiology **wait for physiologic stress**

RR

preanesthesia: 120/70 mm Hg

5': 120/70

10': 120/70

postoperation: 120/70

"inoperable" uvvf type IIAb

h u r (niger state)

female

20 yr

14.07.11

surgeon: kees waaldijk

pat not cooperative with history

assistant: kabir lawal

diagnosis: PI (0 alive), **mutilated "inoperable"** \pm 2 cm 0 urethrovesicovaginal fistula with circumferential defect midline/R type **IIAb** fixed to pubic bones, \pm 2x1 cm transverse proximal rectovaginal fistula middle/R with 2.5 cm rectum stricture type **Ib**, leaking urine/passing stool pv for 3 yr that started immediately following tah-cs bco obstructed labor for 1 day, sb male, married 5 yr ago post(menarche 2 yr earlier), not living with husband, no menstruation since, drop foot R (grade 3) and L (grade 4-5), no yankan gishiri, no h/o eclampsia; normal ap diameter/pubic arch 85°, AR pos, **major** atf/atf + pc_ilc_iscm loss at R, cervix not identified, vagina scarring +++; operated 1x for vvf (mawch_isah), obesity +++; **very confusing history** euo/f 2 cm, f/c"v 4 cm, ab/au 1 cm, a/f 7 cm, i/v 8 cm 155.0 cm

operation: uvvf-"repair"

last resort final

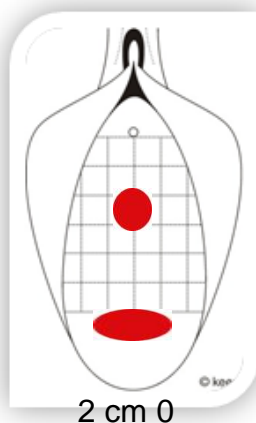
duration: 25 min

healing 75% continence xx

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

bilateral episiotomy, transverse incision thru/at fistula edge, sharp dissection, excision of scar tissue ++, then ?urine? thru rvf (now pat says urine was put together with stools during operation at uduth; as well colostomy thru cs-scar/closure of colostomy), tension-free transverse bladder/urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw ap proximation but there remains gap, check on hemostasis, skin closure; free **urine** flow, euo/bw 10 cm, good anterior elevation, euo/b 2.3 cm pat **highly** uncooperative normal bladder capacity (longitudinal diameter 10-2.3 = 7.5 cm) **everything fixed** good position of uv-junction **against** middle third of symphysis normal-width 2.5 cm poor-quality urethra_euo in anatomic position

nb one ureter in bladder and one ureter in sigmoid; colostomy and then colostomy closure still with rvf; so at least 6-7 operations in different centers



RR
 preanesthesia: 130/80 mm Hg
 5': 130/80
 10': 130/80
 postoperation: 130/80

total circumferential trauma; type IIAa with b characteristics

s l y ingawa (katsina)

female

15 yr

15.07.11

surgeon: kees waaldijk

assistant: kabir lawal

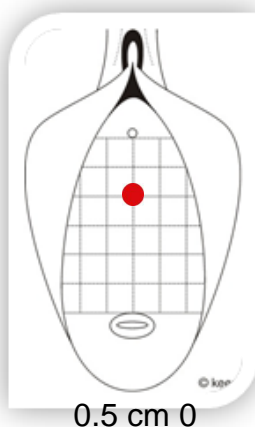
diagnosis: PI (0 alive), \pm 0.5 cm 0 urethrovesicovaginal fistula midline type **IIAa** with **b characteristics** within 1.5 cm broad circular trauma, **leaking urine for 45 days** which started immediately following cs bco obstructed labor for 2 days, sb female, married 1.5 yr ago post(menarche 8 mth earlier), not living with husband, no menstruation, drop foot R (grade 3) and L (grade 3), no rvf, no yankan gishiri, eclampsia yes; normal ap diameter/pubis arch 85°, ar pos, bilateral atf/atl + pc_iloc_iscm loss with ssl_pm trauma, cervix fixed midline, 5x1.5 cm transverse pcf defect **wide open** euo **documentation of large circ trauma with necrosis \pm bilaterally** euo/f 2 cm, f/c 4 cm, ab/au xx cm, i/v 11 cm 145.0 cm

operation: uvvf-repair + transverse fascia repair/bilateral refixation

duration: 40 min (**step-by-step teaching**) healing 95% continence 90%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

episiotomy L, transverse incision thru/at fistula edge, sharp dissection, tension-free transverse fascia repair/bilateral refixation with fistula closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis, epi closure; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 1.8 cm normal bladder capacity (longitudinal diameter 12-1.8 = 10 cm) poor position of uv-junction **fixed against** caudad third of symphysis "normal-width" 1.8 cm medium-quality urethra_euo in anatomic position
the **problem**: **pull/traction by fixed cervix**



RR
preanesthesia: 140/90 mm Hg
5': 140/90
10': 130/80
postoperation: 130/80

pt 193
pt

katsina mdg

vvf 8137/5157/5241/5965
vvf 3748/3909/3966

f s g (katsina)

female

29 yr

15.07.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PII (0 alive), \pm 0.2 cm 0 urethrovesicovaginal fistula **IIBb** midline with **obliterated neourethra**, leaking urine for 4 yr which started following ??, still living with husband, no menstruation for 4 yr (she says after delivery so ?new delivery? since after delivery II normal menstruation), drop foot L (grade 4-5), no rvf, no yankan gishiri, no eclampsia; nor mal ap diameter/pubis, cervix fixed onto i spine L
"euo"/f 2 cm, f/c 2 cm, i/v 9 cm 151.5 cm

operation: disobliteration + uvvf-repair

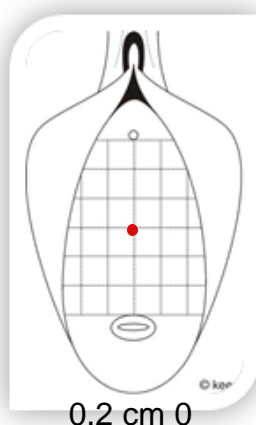
last resort final

duration: 25 min

healing 50% continence 50%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

re-episiotomy L, disobliteration by stab incision, transverse incision thru fistula edge, sharp dissection, tension-free transverse bladder/urethra closure with bilateral fixation of "pcf" onto paraurethra atf by 1x serafit each side by single layer of inverting serafit, urine ++ thru euo on rest, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis, epi closure; free urine flow, euo/bw 9 cm, good anterior elevation, euo/b 1.8 cm probably "neourethra" will **obliterate** again normal bladder capacity (longitudinal diameter 9-1.8 = 7 cm)
poor position of uv-junction **against** caudad third of symphysis
normal-width 2 cm poor-quality urethra_euo in anatomic position



RR
preanesthesia: 130/80 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

r a b (katsina)

female

27 yr

15.07.11

surgeon: dr isdris halliru

assistant: gambo lawal

diagnosis: PVIII (3 alive), \pm 1 cm 0 urethrovesicovaginal fistula type **IIAa** at midline within 4x1 cm transverse avw trauma, **leaking urine for 18** which started immediately following obstructed last labor for 2 days, st home sb male, married 14 yr ago post(menarche 1 mth earlier), still living with husband, no menstruation, drop foot R (grade 4) and L (grade 4), no rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/pubic arch 85°, ar pos, cervix mobile, transverse 4x1 cm pcf defect R > L
euo/f 3 cm, f/c 3 cm, i/v 11 cm 152.5 cm

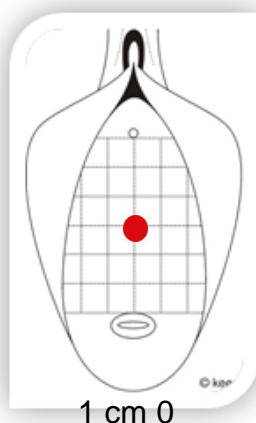
operation: uvvf-repair + transverse fascia repair

duration: 30 min

healing 95% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision thru/at fistula edge, sharp dissection, tension-free transverse fascia repair with bladder/urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, ballooning of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 2.7 cm
normal bladder capacity (longitudinal diameter 12-2.7 = 9.5 cm)
good position of uv-junction **against** middle third of symphysis
normal-width 2.5 cm good-quality urethra_euo in anatomic position



RR
preanesthesia: 160/90 mm Hg
5': 150/90
10': 140/90
postoperation: 130/80

h m s b (katsina)

female

15 yr

15.07.11

surgeon: dr idris halliru

assistant: gambo lawal

diagnosis: PI, \pm 2.5 cm 0 urethrovesicovaginal fistula type **IIAb** with circumferential defect, **leaking urine for 31 days** which started immediately following cs bco obstructed labor for 2 days, sb female, married 3 yr ago pre(menarche 1 yr later), not living with husband, no menstruation, drop foot R (grade 4) and L (grade 5), no rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/pubis arch 85° , ar pos, cervix fixed midline, bilateral atf/atl + pc_ilc_iscm lod, lpl stricture
euo/f 1.5 cm, f/c 3 cm, i/v 12 cm 152.5 cm

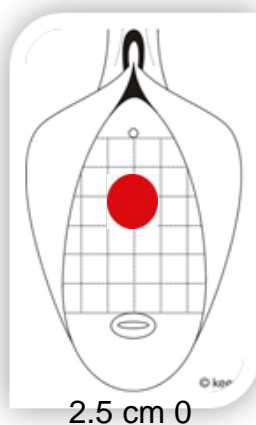
operation: circumferential uvvf-repair + pcf refixation

duration: 40 min

healing 80% continence 85%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision thru/at fistula edge, sharp circumferential dissection, tension-free circumferential bladder/urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, ballooning of foley ch 18, transverse avw approximation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 1.7 cm
normal bladder capacity (longitudinal diameter 12-1.7 = 10.5 cm)
poor position of uv-junction **against** caudad third of symphysis
normal-width 2.5 cm medium-quality urethra_euo in anatomic position



RR
preanesthesia: 120/80 mm Hg
5': 120/70
10': 120/70
postoperation: 120/70

pt 196

katsina mdg
post IIAb repair

vvf 8138

s u w (rép niger)

female

20 yr

16.07.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PI (0 alive), **mutilated** post **IIAb** total urine intrinsic_stress incontinence grade III, leaking urine whilst lying/sitting/standing/walking + no spontaneous miction for 5 yr which started immediately following obstructed labor for 3 days, in hospital sb male, married 7 yr ago pre(menarche 3 mth later), not living with husband, normal menstruation (**nb under family planning**), bilateral drop foot for 2 mth R (grade 5) and L (grade 4), no rvf; no yankan gishiri, no h/o eclampsia; normal ap diameter/pubis arch 85°, ar pos, cervix mobile, operated 3x (damagarm) obesity ++
euo/c 4 cm **open traumatized** urethra_euo posteriorly drawn inside
euo/bw 13 cm, poor elevation, euo/b 0.2 cm, i/v 11 cm 159.0 cm

operation: excision, euo-rhaphy + paraurethra_euo fixation of pc fascia

duration: 25 min (**step-by-step teaching**) healing 90% continence 85%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

100 ml gv: **no** leakage urine level in accord with respiration
transverse incision at 2 cm from euo thru repair scar, sharp dissection, excision of **scar/mutilation tissue ++**, closed euo rhaphy by 1x serafit, bilateral distal fixation of medium-quality proximal pc fascia onto paraurethra-euo atf by 2x serafit each side with urethra_euo repositioning/stabilization and fascia tightening, now euo/b 1.2 cm, **no** urine thru euo on rest/cough/pressure, triple fixation of foley ch 18, pack; free urine flow, euo/bw cm, good anterior elevation, euo/b 1.2 cm (**urethralization_compression**)
normal bladder capacity (longitudinal diameter 13-1.2 = 12 cm
poor position of uv-junction **against** caudad third of symphysis
medium fascia plate **under physiologic stress/estrogens it may normalize/heal**
normal-width 1.2 cm poor-quality urethra_euo in anatomic position

RR
preanesthesia: 130/70 mm Hg
5': 120/70
10': 120/70
postoperation: 120/70

pt 197

katsina mdg
total circumferential trauma

vvf 8139
rvf

I s d (katsina)

female

15 yr

16.07.11

surgeon: kees waaldijk

assistant: kabir lawal

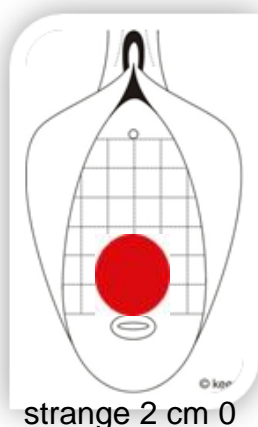
diagnosis: PI (0 alive), **strange** ± 2 cm 0 urethrovesicovaginal fistula type **IIAa** midline within circular vagina trauma, **leaking urine for 42 days** which started immediately following obstructed labor for 2 days, in hospital sb male, married 2 yr ago pre(menarche 6 mth later), not living at husband, no menstruation, drop foot R (grade 4) and L (grade 4), 1.5 cm 0 **necrotic** proximal midline pvw/cervix trauma (**never** tusa pv), no rvf, no yankan gi shiri, no h/o eclampsia; ap diameter/pubis arch 85°, ar pos, cervix mobile euo/f 2.5 cm, f/c 0 cm, i/v 10 cm 149.0 cm

operation: debridement + **complicated** uvvf-repair

duration: 30 min healing 95% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

median episiotomy, transverse incision thru/at fistula edge, sharp dissection, debride ment, tension-free transverse bladder/urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw/cervix adaptation by 2x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 2.3 cm normal bladder capacity (longitudinal diameter 12-2.3 = 9.5 cm) good position of uv-junction **against** middle third of symphysis normal-width 2.5 cm good-quality urethra_euo in anatomic position



RR
 preanesthesia: 130/80 mm Hg
 5': 120/70
 10': 120/70
 postoperation: 120/70

pt 198

katsina mdg
anterior trauma

vvf 8140
cath 1365

s h k (katsina)

female

27 yr

16.07.11

surgeon: dr bawa bure/kees waaldijk

assistant: kabir lawal

diagnosis: PVI (2 alive), \pm 1 cm 0 urethrovesicovaginal fistula type **IIAa** at midline, **leaking urine for 34 days** which started immediately following obstructed last labor for 2 days, in hospital live male, married 15 yr ago pre(menarche 9 mth later), still living with husband, no menstruation, drop foot R (grade 4) and L (grade 2), no rvf, no yankan gishiri, eclampsia yes; normal ap diameter/pubis arch 85° , ar pos, cervix mobile
euo/f 2 cm, f/c 4 cm, i/v 11 cm 150.0 cm

operation: uvvf-repair

duration: 25 min (**personal supervision**) healing 90% continence 85%

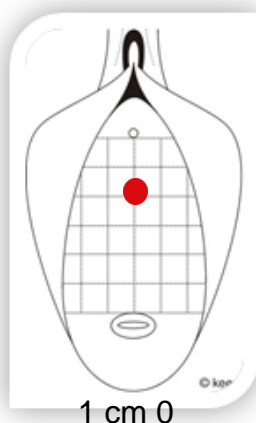
anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision thru fistula edge, sharp dissection, tension-free transverse bladder/urethra closure by single layer of inverting serofit, **no** urine thru suture line/euo on rest/cough/pressure, ballooning of foley ch 18, transverse avw adaptation by 2x everting serolon, check on hemostasis; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 1.7 cm

normal bladder capacity (longitudinal diameter 12-1.7 = 10.5 cm)

poor position of uv-junction **against** caudad third of symphysis

normal-width 1.5 cm good-quality urethra_euo in anatomic position



RR
preanesthesia: 130/80 mm Hg
5': 120/70
10': 120/70
postoperation: 120/70

pt 199

katsina mdg

vfv 8141

anterior trauma; span too wide; median pcf defect

a i s r (katsina)

female

18 yr

16.07.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PIII (1 alive), postpartum **genuine** urine intrinsic_stress incontinence grade II, leaking urine whilst standing/walking but not whilst lying/sitting + spontaneous miction for 1 yr which started immediately following last obstructed labor for 2 days, in hospital live male, married 5 yr ago pre (menarche 2 mth later), still living with husband, normal menstruation, no (h/o) drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/**wide** pubic arch 95°, ar pos, 1°-2° cervix prolapse, cystocele ++ euo/c 10 cm **wide open** urethra_euo euo/bw 13 cm, poor elevation, euo/b 1.5 cm, i/v 13 cm 156 cm

operation: urethralization by longitudinal fascia repair and pc fascia fixation

duration: 25 min (**step-by-step teaching**) healing 95% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse curved incision at 2 cm from euo parallel/within ruga folds, sharp dissection, 8x2.5 cm median/R longitudinal fascia defect from cervix up to 2 cm to euo, longitudinal repair/rhaphy of pc fascia at 2-8 cm from euo by serafit with normalization of urethra_euo, now euo/b 2.3 cm, **no** urine thru euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw_pcf/symphysis_avw adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 13 cm, good elastic anterior elevation, euo/b 2.3 cm (**urethralization**) good fascia plate good-quality pcm normal bladder capacity (longitudinal diameter 14-2.3 = 11.5 cm) good position uv-junction **against** middle third symphysis normal-width 2.5 cm good-quality urethra_euo in anatomic position

RR

preanesthesia: 120/80 mm Hg

5': 120/70

10': 120/70

postoperation: 120/70

anterior + iatrogenic trauma

h d s (sokoto)

female

26 yr

16.07.11

surgeon: dr said ahmed

assistant: gambo lawal

diagnosis: PII (0 alive), \pm 3 cm 0 cs-vesicocervicovaginal fistula type I at midline, leaking urine for 7 mth which started immediately following cs bco last obstructed labor for 1 day, sb male, married 13 yr ago pre(menarche 5 mth later), still living with husband, normal menstruation, drop foot R (grade 4) and L (grade 4), no rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/pubis arch 85°, ar pos, cervix fixed midline
euo/f 5 cm, f/c 0 cm, i/v 11 cm 147.0 cm

operation: cs-vcvf-repair

duration: 60 min

healing 85% continence 90%

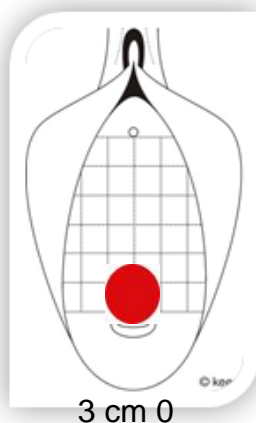
anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

bilateral episiotomy, incision at fistula edge, sharp dissection, tension-free longitudinal bladder closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 0.8 cm

normal bladder capacity (longitudinal diameter 12-0.8 = 11 cm)

poor position of uv-junction **against** caudad third of symphysis

normal-width 1 cm good-quality urethra_euo in anatomic position



RR
preanesthesia: 120/80 mm Hg
5': 120/70
10': 120/70
postoperation: 120/70

pt 201	katsina mdg	vvf 046
pt		vvf 7183
pt	careless _ 4/5th obstetric leakage	vvf 2307
pt	poor-quality tissue	vvf 4714
pt		rvf 913

s m k (katsina) female 42 yr 15.07.11

surgeon: dr said ahmed

assistant: gambo lawal

diagnosis: PXII (2 alive), total post **extensive "inoperable" IIBb** delivery urine intrinsic-stress incontinence grade III, leaking urine whilst lying/sitting/standing/walking + no spontaneous miction for 1 yr which started immediately following "miscarriage" for 1 day, at home sb male, married 32 yr ago pre(menarche 4 yr later), still living with husband, no menstruation, drop foot R (grade 3) and L (grade 3), no yankan gishiri; normal ap diameter /narrow pubic arch 75°, ar pos, bilateral atf/atl + pc_ ilcm loss, everything fixed, lpl stricture **nb urethralization** 29.8.08 and 10.5.09 (id) after "miscarriage"; ok at 7-mth po 7.12.09 **wide open urethra_euo** euo/bw 8 cm, poor elevation, euo/b 1 cm, i/v 10 cm 140.0 cm

operation: urethralization, euo-rhaphy and bilateral pcf fixation

duration: 50 min healing 85% continence 60%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision at 2 cm from euo, sharp dissection, longitudinal rhaphy of fascia by serafit, euo-thaphy by serafit, bilateral pcf fixation onto paraurethra atf by serafit, **no** urine thru suture line/euo on rest/cough/pressure, ballooning of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis; free scanty urine flow, euo/bw 8 cm, good anterior elevation, euo/b 2 cm moderate bladder capacity (longitudinal diameter 8-2 = 6 cm) acceptable position of uv-junction **against** middle/caudad third of symphysis normal-width 2 cm poor-quality urethra_euo in anatomic position

RR
preanesthesia: 130/80 mm Hg
5': 120/70
10': 120/70
postoperation: 120/70

pt 202
pt

katsina
third obstetric fistula/leakage

vvf 047
vvf 4753
cath aahaa

h s r (katsina)

female

36 yr

16.07.11

surgeon: dr said ahmad

assistant: gambo lawal

diagnosis: PXI (0 alive), \pm 8x6x5 cm **impacted** bladder stone with 0.5 cm 0 urethro vesicovaginal fistula **IIAa**, leaking urine for 2 yr which started immediately following obstructed last labor for 2 days, at home sb male, married 25 yr ago pre(menarche 2 yr later), still living with husband, nor mal menstruation, drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/pubis arch 85°
euo/f 4 cm, f/c 0 cm

145.0 cm

operation: vaginal cystostomy + stone removal as **first stage**

duration: 20 min

healing

continence

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision thru fistula, difficult stone removal in pieces, flushing debris out of bladder, ballooning of foley ch 18
everything left open for repair in 2-3 wk

RR
preanesthesia: 160/90 mm Hg
5': 160/90
10': 150/90
postoperation: 140/80

pt 204
pt

katsina mdg
ba hanya

vvf 8143/4600/7420
rvf 1030/545/./941

y r
s s s (kaduna)

female

27 yr

17.07.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PI (0 alive), **ba hanya + stool pv** following multiple vvf/rvf-repairs 8.10. 99 to 7.6.08, **not leaking urine at all**, still living at 2nd husband, no menstruation, drop foot R (grade 4-5) and L (grade 5); normal ap diameter/narrow pubic arch 70°, severe funnel-shap vagina stenosis/shortening
i/v 3 cm obesity + 156.0 cm

operation: **assessment**

final

duration: 10 min

healing

continence

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

urine fistula: dye test: **no** leaking/**no** dye thru euo on rest/cough/pressure, euo/bw 12 cm, good elevation, euo/b 3.0 cm

RE/ rvf completely healed however, **anterior anus pulled inside over 2 cm responsible for stool/flatus incontinence**

since severe scarring/fibrosis **never** for hanya operation

nb pat eating in the morning + vomiting fura during examination

RR

preanesthesia: 130/80 mm Hg

5': 130/80

10': 130/80

postoperation: 130/80

probably second obstetric fistula

z n w (rép niger)

female

29 yr

17.07.11

surgeon: dr idris halliru

assistant: gambo lawal

diagnosis: PIV (0 alive), \pm 0.2 cm 0 urethrovesicovaginal fistula type **IIAb** at R lungu, leaking urine for 14 yr which started immediately following obstructed first labor for 2 days, in hospital sb male, married 17 yr ago pre(menarche 1 yr later), still living with husband, normal menstruation, bilateral drop foot for 2 mth R (grade 5) and L (grade 5), no rvf, no yankan gishiri, eclampsia no h/o; normal ap diameter/pubis arch 85°, ar pos, cervix fixed, operated 3x (1x damagaram and 2x b/r 12 yr ago; lost particulars)
euo/f 1.5 cm, f/c 4 cm, i/v 10 cm 151.0 cm

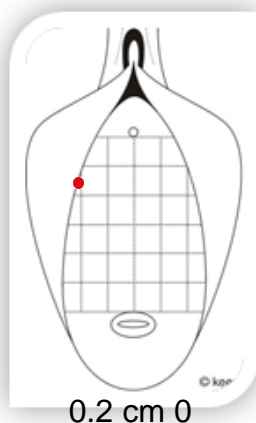
operation: uvvf-“repair”

duration: 40 min

healing 80% continence 60%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision thru fistula, sharp dissection, scar tissue/fibrosis ++, tension-free transverse bladder/urethra “closure” by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, ballooning of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 8 cm, good anterior elevation, euo/b 1.6 cm
moderate bladder capacity (longitudinal diameter 8-1.6 = 6.5 cm)
acceptable position of uv-junction **against** middle/caudad third of symphysis
deformed open 1.6 cm poor-quality urethra_euo pulled inside



RR
preanesthesia: 140/90 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

pt 208
pt
pt

katsina mdg vvf 049
second obstetric fistula

vvf 7650/7849
vvf 4556
vvf 5113

a b b (katsina) female 26 yr 17.07.11

surgeon: dr idris halliru

assistant: gambo lawal

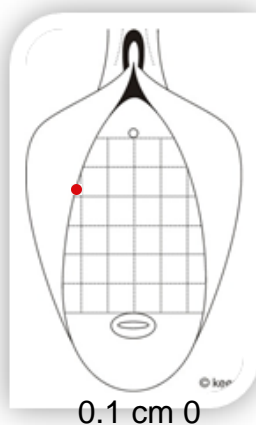
diagnosis: residual minute < 01 cm lungu fistula R with total post extensive **IIAb** intrinsic incontinence following multiple repairs 2.6.01 to 26.6.09, not living with husband, normal menstruation, drop foot R (grade 3-4) and L (grade 4-5) both with gm_at contracture, no rvf, no yankan gishiri, no eclampsia; normal AP diameter/narrow pubic arch 75°, AR pos, bilateral atf/atl + pc_io_ilc_iscm loss, moderate stenosis/severe shortening, cervix fixed i spine R **open** 1 cm urethra_euo pulled inside posteriorly euo/f 1.5, f/c 3 cm, i/v 6 cm 154.5 cm

operation: uvvf-repair + bilateral pcf fixation

duration: 40 min healing 90% continence 80%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision thru fistula, sharp dissection, tension-free transverse bladder/urethra closure by single layer of inverting serafit, bilateral fixation of pcf onto para-euo atf by serafit, **no** urine thru suture line/euo on rest/cough/pressure, ballooning of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 2.4 cm normal bladder capacity (longitudinal diameter 12-2.4 = 9.5 cm) good position of uv-junction **against** middle third of symphysis normal-width 2.5 cm medium-quality urethra_euo in anatomic position



RR
preanesthesia: 130/90 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

pt 209
pt
pt

katsina mdg
new rvf

rvf 002
vfv 7088
rvf 901
cath 1042

h s y-y (katsina) female 41 yr 17.07.11

surgeon: dr idris halliru

assistant: gambo lawal

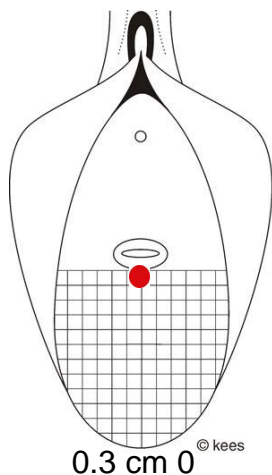
diagnosis: PXI (4 alive), **new** \pm 0.3 cm midline proximal rectovaginal fistula type **la**, passing stool pv for ?? (on 23.6 everything ok on follow-up with **3 mth amenorrhea**) which started following ?miscarriage?, married 28 yr ago pre(menarche 1 mth later), still living with husband, normal menstruation, drop foot R (grade 5) and L (grade 5), no yankan gishiri; normal ap diameter/ pubic arch 90°, ar pos, ssl_cm loss at L, cervix fixed/moving; vfv/rvf **healed** after repair 25.5.07 pr/ **no** stricture
a/f 12 cm, i/v 12 cm 152.0 cm

operation: rvf-repair

duration: 30 min healing 95% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision thru fistula edge, sharp dissection, rectum closure by 2x inverting serafit, pvw adaptation by everting 2x seralon, check on hemostasis



RR
preanesthesia: 130/80 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

pt 210
pt

katsina mdg
second obstetric fistula

vvf 8145
vvf 5673

b b s (katsina)

female

26 yr

18.07.11

surgeon: kees waaldijk

assistant: kabir lawal

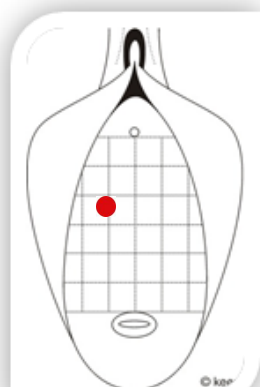
diagnosis: PIV (1 alive), **extensive** ± 0.3 cm 0 urethrovesicovaginal fistula **IIBb** at L with urethra block/circumferential defect, leaking urine of 5 mth which started immediately following obstructed last labor for 1 day, at home live male, married 16 yr ago pre(menarche 3 yr later), not living at husband, no menstruation, drop foot R (grade 3) and L (grade 5), no rvf, no yankan gishiri, no h/o eclampsia; normal AP diameter/pubis arch 85, ar **pos** bilateral atf/atf + pc_iloc_iscm loss, 1°-2° cervix prolapse; more or less ok (incontinence at cough/standing up) following last operation
euo/f 1 cm, f/c 1.5 cm, ab/au xx 2 cm, i/v 11 cm 156.0 cm

operation: uvvf-repair + bilateral "pcf" re-fixation **wide open urethra_euo**

duration: 30 min (**step-by-step teaching**) healing 95% continence 70%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

re-episiotomy L, deblocking uv-junction, large transverse incision thru fistula, sharp dissection, tension-free transverse **poor-quality** "fascia" repair/bilateral fixation onto para urethra_euo atf with fistula closure by 2x serafit each side, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw/avw_cervix adaptation by 2x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 11 cm, good anterior elevation, euo/b 1.8 cm
normal bladder capacity (longitudinal diameter 11-1.8 = 9 cm)
acceptable position of uv-junction **fixed against** middle/caudad third of symphysis
"normal-width" 2 cm poor-quality urethra_euo in "anatomic position"
the **problem: extensive trauma/poor tissue quality**



extensive 0.3 cm 0

RR
preanesthesia: 130/90 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

pt 211

katsina mdg

vvf 8146/7690/7786

extensive circumferential + iatrogenic cs trauma

a i t (katsina)

female

39 yr

02.10.09

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PVIII (3 alive), residual minute **scarred** \pm 0.1 cm 0 urethrovesicovaginal fistula L type **IIBb** with circumferential defect/anterior cervix loss following repairs 2.10.09 to 24.2.10, still living with husband, normal menstruation, drop foot R (grade 5) and L (grade 5); normal ap diameter/pubis arch 85, ar pos, atf/atl + pc_iloc_iscm loss L >> R, cervix fixed onto i spine L euo/f 1 cm, f/c 0.5 cm, ab/au xx 0 cm, i/v 10 cm 159.0 cm

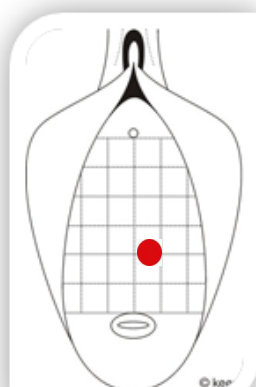
operation: **complicated** uvvf-repair, pcf fixation R + avw correction

duration: 40 min

healing 85% continence 70%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision thru fistula with longitudinal extension over urethra, sharp dissection, excision of scar tissue +, tension-free longitudinal urethra raphy with closure by single layer of inverting serafit, only at R fixation of pc fascia onto para-euo atf by 1x serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, avw correction by avw rotation flap from R by 4x fixation onto paraurethra symphysis by 2x everting seralon each side, check on hemostasis, tight pack for hemostasis; free urine flow, euo/bw 10 cm, good anterior elevation, euo/b 1.4 cm normal bladder capacity (longitudinal diameter 10-1.4 = 8.5 cm) poor position of uv-junction **against** caudad third of symphysis normal-width 1.4 cm medium-quality urethra_euo in anatomic position the **problem: everything fixed/poor tissue quality right from the beginning**



scarred 0.1 cm 0

RR
preanesthesia: 130/80 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

pt 212
pt 213

katsina mdg
extensive circumferential trauma
inoperable type IIBb; ?ureterosigmoidostomy?

rvf 1032
vfv 8147

r s s b (sokoto) female 27 yr 18.07.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PI (0 alive), **extensive inoperable** ± 6 cm 0 urethrovesicovaginal fistula type **IIBb** with circumferential defect/bilateral ureter prolapse, transverse 1.5x0.5 cm proximal rectovaginal fistula type **Ia** fixed onto i spine R (no rectum stricture), leaking urine/passing stools pv for 12 yr which started immediately following obstructed labor for 1 days, in hospital sb male, married 15 yr ago pre(menarche 1 yr later), not living with husband, no menstruation since, drop foot R (grade 3-4) and L (grade 3-4), no yankan gishiri, no h/o eclampsia; normal ap diameter/pubic arch 85°, ar pos, bilateral atf/atl + pc_ilc_iscm loss, cervix not identified/fixed, severe vagina stenosis/moderate shortening; operated 1x abdominally euo/f 0 cm, f/c 0 cm, ab/au 1 cm, i/v 8 cm, a/f 7 160.5 cm

operation: **ps-like** rvf-repair + assessment of **inoperable IIBb** urine fistula

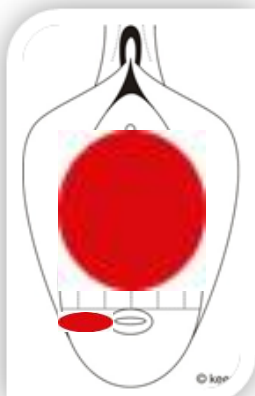
duration: 40 min healing 85% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

episiotomy R thru scarred stenosis, incision at fistula edge, no dissection, **complicated ps-like** transverse "cervix"/pvw closure by 4x everting seral on

extensive 6 cm 0 type **IIBb** fistula with bilateral ureter prolapse, ab/au 1 cm at 3 cm from "euo", everything fixed with severe vagina stenosis, direct bladder longitudinal diameter 6 cm, open ureter ostium L (hydroureter); operated 1x abdominally, though pat says not for fistula watery stools per anum (**?ureterosigmoidostomy?**)

once continuous passing of stools pv stops tissue might soften up; for review in 1 yr



transverse 1.5x0.5 cm

RR
preanesthesia: 150/100 mm Hg
5': 140/90
10': 130/80
postoperation: 130/80

pt 213
pt 212

katsina mdg
extensive circumferential trauma
inoperable type IIBb; ?ureterosigmoidostomy?

vvf 8147
rvf 1032

r s s b (sokoto)

female

27 yr

18.07.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PI (0 alive), **extensive inoperable** ± 6 cm 0 urethrovesicovaginal fistula type **IIBb** with circumferential defect/bilateral ureter prolapse, transverse 1.5x0.5 cm proximal rectovaginal fistula type **Ia** fixed onto i spine R (no rectum stricture), leaking urine/passing stools pv for 12 yr which started immediately following obstructed labor for 1 days, in hospital sb male, married 15 yr ago pre(menarche 1 yr later), not living with husband, no menstruation since, drop foot R (grade 3-4) and L (grade 3-4), no yankan gishiri, no h/o eclampsia; normal ap diameter/pubic arch 85°, ar pos, bilateral atf/atl + pc_ilc_iscm loss, cervix not identified/fixed, severe vagina stenosis/moderate shortening; operated 1x abdominally euo/f 0 cm, f/c 0 cm, ab/au 1 cm, i/v 8 cm, a/f 7 160.5 cm

operation: **ps-like** rvf-repair + assessment of **inoperable IIBb** urine fistula

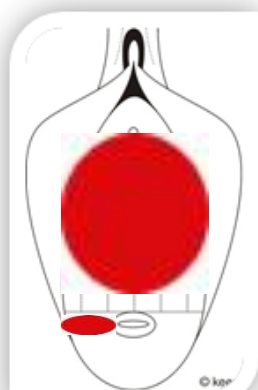
duration: 40 min healing 85% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

episiotomy R thru scarred stenosis, incision at fistula edge, no dissection, **complicated ps-like** transverse "cervix"/pvw closure by 4x everting seral on

extensive 6 cm 0 type **IIBb** fistula with bilateral ureter prolapse, ab/au 1 cm at 3 cm from "euo", everything fixed with severe vagina stenosis, direct bladder longitudinal diameter 6 cm, open ureter ostium L (hydroureter); operated 1x abdominally, though pat says not for fistula watery stools per anum (?**ureterosigmoidostomy?**)

once continuous passing of stools pv stops tissue might soften up; for review in 1 yr



extensive 6 cm 0

RR
preanesthesia: 150/100 mm Hg
5': 140/90
10': 130/80
postoperation: 130/80

pt 214
pt

katsina mdg
second obstetric fistula

vvf 8148/6905
vvf 3760/3873
rvf aaibu

s i m (zamfara)

female

31 yr

18.07.11

surgeon: kees waaldijk

assistant: kabir lawal

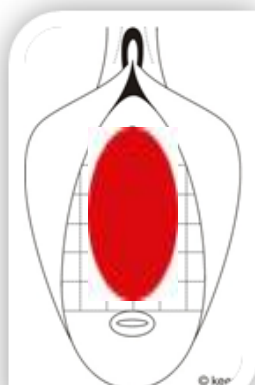
diagnosis: PII (0 alive), **residual** ± 2x1 cm 0 urethrovesicovaginal fistula **IIBb** after **nicely healed** circumferential bladder fixation as **first staged** 25.10.06, not living with husband, normal menstruation, drop foot R (grade 3-4) and L (grade 5), **healed** 1 cm 0 proximal pvw trauma fixed at cervix (tusa pv for 1 mth), healed rvf; normal ap diameter/narrow pubic arch 75°, ar **pos**, **no longer** saddle anesthesia, bilateral atf/atl + pc_ilc_iscm proximal lpl stricture, vagina stenosis/shortening, asymmetric pelvis, healed ulcer L trochanter majus, cervix fixed towards spine R, ssl_pm trauma L
euo/f 0 cm, f/c 0 cm, i/v 9 cm 148.0 cm

operation: "continent" urethra/fascia/avw reconstruction

duration: 40 min healing 85% continence 60%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

re-episiotomy L, wide H incision around fistula, sharp dissection, sharp mobilization of (para)urethra tissue, tension-free longitudinal urethra reconstruction over 2 cm with repositioning of retracted uv-junction by single layer of inverting interrupted serafit, bilateral fixation of poor-quality pc fascia onto paraurethra atf by 1x serafit each side (more is not possible), euo/b 2.1 cm, **no** urine thru suture line/euo on rest/cough but still ± on pressure, triple fixation of foley ch 18, avw reconstruction by "avw"/cervix advancement flap by 4-point fixation to paraurethra atf/symphysis by everting seralon, check on hemo stasis, epi closure; free urine flow, euo/bw 11 cm, good anterior elevation, euo/b 2.1 cm normal bladder capacity (longitudinal diameter 11-2.1 = 9 cm)
good position uv-junction **against** middle third symphysis
normal-width 2 cm poor-quality urethra_euo in anatomic position



residual 2x1 cm

RR
preanesthesia: 150/90 mm Hg
5': 140/80
10': 130/80
postoperation: 130/80

pt 215		katsina mdg	vvf 050	vvf 4209/.7505
pt		kano		vvf 912/1096/1294
	r (katsina)			
h n g (kano city)		female	50 yr	18.07.11
surgeon:	dr said ahmad			
assistant:	gambo lawal			
diagnosis:	PVI (2 alive), ± 4x3x2 cm bladder stone with incontinence, not living with husband, menopause 8 yr ago; normal ap diameter/pubic arch 85°			
	i/v 10 cm			158.0 cm
operation:	suprapubic cystostomy + stone removal			
duration:	60 min		healing 95%	continence 50%
anesthesia:	spinal L4/L5 with 3 ml bupivacaine 0.5%			

bladder opening by suprapubic cystostomy, stone removal, flushing debris out of bladder, closure in layer
ballooning of foley ch 18 free urine flow

	RR
preanesthesia:	160/100 mm Hg
5':	150/90
10':	140/90
postoperation:	130/80

pt 216

katsina mdg

vvf 051

wf 5163/./7680

r y g (katsina)

female

28 yr

18.07.11

surgeon: dr said ahmad/dr ahmed bolaji

assistant: gambo lawal

diagnosis: PI, postrepair stress incontinence grade III, leaking of urine whilst lying/sitting/standing/walking following multiple repairs, still with husband, normal menstruation, drop foot (grade 5) and L (grade 4-5);?ap diameter?/borderline pubic arch 80°, moderate vagina shortening/stenosis, **wide open** chort urethra_euo
euo/bw 10 cm, moderate elevation, euo/b 1.2 cm, i/v 7 cm 142.0 cm

operation: urethralization, euo-rhaphy + pcf fixation

duration: 60 min

healing 80% continence 70%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision thru previous repair scar, sharp dissection, fascia rhaphy, euo-rhaphy, bilateral pcf fixation, **no** urine thru suture euo on rest/cough/pressure, balloon ing foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 4.0 cm
normal bladder capacity (longitudinal diameter 12-4 = 8 cm)
good position of uv-junction **against** middle third of symphysis
normal-width 4 cm poor-quality urethra_euo in anatomic position

RR

preanesthesia: 130/80 mm Hg

5': 120/70

10': 120/70

postoperation: 120/70

pt 217	katsina mdg	vvf 052	vvf 6909
pt	new obstetric leaking		vvf 5958
pt	zinder		VVF 80

f a g (rép niger) female 27 yr 18.07.11

surgeon: dr said ahmad/dr hayatudeen

assistant: gambo lawal

diagnosis: PIV, post **IIAa** total urine intrinsic_stress incontinence grade, married 15 yr ago pre(menarche 8 mth later), living with husband, normal menstruation, drop foot R (now grade 5) and L (grade 5); normal ap diameter/narrow pubic arch 70°, **wide open** uethra _euo euo/bw 14 cm, good elevation, euo/b 1 cm 161.0 cm

,operation: urethralization, euo-rhaphy + fixation

duration: 60 min healing 80% continence 90%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision thru repair scar, sharp dissection, fascia rhaphy, euo rhaphy, bilateral fixation, **no** urine thru suture line/euo on rest/cough/pressure, ballooning of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 14 cm, good anterior elevation, euo/b 3.0 cm normal bladder capacity (longitudinal diameter 14-3 = 11 cm) good position of uv-junction **against** middle third of symphysis normal-width 3 cm medium-quality urethra_euo in anatomic position

	RR
preanesthesia:	130/80 mm Hg
5':	120/70
10':	120/70
postoperation:	120/70

pt 218

katsina mdg
anterior trauma

cath 1369

h h n (kaduna city)

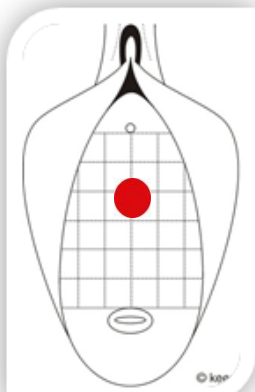
female

26 yr

18.07.11

diagnosis: PI (0 alive), \pm 2 cm 0 **necrotic** urethrovesicovaginal fistula type **IIAa** at tip of 4 cm 0 avw trauma, **leaking urine for 6 days** that started immediately following obstructed labor for 1 day, in hospital sb male, married 3 yr ago post(menarche 10 yr earlier), still living with husband, no menstruation, no drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/pubis arch 85°, ar pos
euo/f 2 cm, f/c 4 cm 162.5 cm

18.07.11 foley ch 18; free urine flow, euo/bw 12 cm, good anterior elevation and euo/b 2 cm
normal bladder capacity (longitudinal diameter 12-2 = 10 cm)
acceptable position uv-junction **against** middle/caudad third symphysis
normal-width 2 cm medium-quality urethra_euo in anatomic position
probably it will heal



necrotic 2 cm 0

pt 219
pt

katsina mdg

vvf 8149/510/./3653

last resort final of extensive cir obstetric trauma

rvf 44

a s s (rép niger)

female

47 yr

19.07.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PI (0 alive), total post **extensive IIBAb** urine intrinsic_stress incontinence grade III, leaking urine whilst lying/sitting/standing/walking following repair 30.12.86 to 10.10.96, for 27 yr which started immediately following obstructed labor for 3 days, in hospital damagaram sb male, married 33 yr ago post(menarche 1 yr earlier), not living with husband, menopause 2 yr ago, bilateral drop foot for 1yr R (grade 4-5) and L (grade 4-5), no yankan gishiri, rvf **healed**, eclampsia yes; normal ap diameter/pubis arch 85°, major bilateral atf/atl + pc_io_ilc_iscm loss + ssl_pm trauma, **empty pelvis**, severe vagina shortening, ant anus pulled inside by scar tissue, de hiscent perineal body, no flatus incontinence, **no labia** "open" euo euo/bw 12 cm, good elevation, euo/b 2.8 cm, i/v 3 cm 153.0 cm

operation: assessment + bilateral **paraneourethra** tissue fixation **last resort final**

duration: 20 min

healing 85% continence 50%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

gv/ **no** leakage but total intrinsic-stress incontinence

incision at euo with bilateral longitudinal paraurethra extension, sharp dissection, bilateral fixation of **paraneourethra** tissue/avw onto para-euo symphysis by 2x seralon, **no** urine thru euo on rest/cough/pressure, ballooning of foley ch 18, check on hemostasis; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 2.8 cm

normal bladder capacity (longitudinal diameter 12-2.8 = 9 cm)

good position of uv-junction **fixed against** middle third of symphysis

normal-width 3 cm medium urethra_euo in anatomic position

since no flatus incontinence (**healed** intact sphincter ani) and since anterior anus pulled in by scarring no attempt made at perineal body repair

actually, everything nicely healed considering the obstetric trauma

RR

preanesthesia: 130/80 mm Hg

5': 130/80

10': 130/80

postoperation: 130/80

pt 220	katsina mdg	wvf 8150/3937
pt	fourth/fifth obstetric fistula	wvf 682/1067
pt	pat not cooperative	wvf 1753/2015
pt		wvf 2897/3392
		rvf 88/130

r s k (jigawa) female 43 yr 19.07.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PV (0 alive), total post **IIAb** delivery urine intrinsic_stress incontinence grade III, leaking urine whilst lying/sitting/szanding/walking + no spontaneous miction following reapi for **4th obstetric** fistula, delivered again 7 yr ago for 1 day, at home sb male, married 31 yr ago pre(menarche 1 yr later), not living with husband, no menstruation since last delivery, drop foot R (grade 5) and L (grade 4-5), rvf **healed**, no yankan gishiri, eclampsia delivery I; normal ap diameter/pubic arch 85°, major bilateral atf/atl + pc_io_ilc_iscm loss, cervix fixed onto i spine R, moderate vagina short ening **nb this is the 10th procedure since 7.8.87 wide open** euo euo/bw 9 cm, good elevation, euo/b 1.0 cm, i/v 5 cm 150.0 cm

operation: euo-rhaphy, fixation R, bilateral para-euo fixation **last resort final**

duration: 25 min healing 85% continence 50%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

gv/ no leakage, u incision at euo with bilateral longitudinal extension R > L since no connection pcf onto paraurethra atf at R, sharp dissection, fixation of pcf/avw onto R paraurethra atf by 1x sedralon, euo-rhaphy by 1x serafit, bilateral fixation of "pcf" onto para-euo atf by 1x serafit each side, **no** urine thru euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon, check on he mostasis; free urine flow, euo/bw 9 cm, good anterior elevation, euo/b 1.4 cm normal bladder capacity (longitudinal diameter 9-1.4 = 7.5 cm) poor position of uv-junction **fixed against** caudad third symphysis normal-width 1.5 cm poor-quality urethra_euo in anatomic position the **problem: severe scarring after all the repair** pat vomiting food io

RR
preanesthesia: 130/80 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

pt 221
pt

katsina mdg
post IBa repair last resort final
repair of completely dehiscient perineal body

vvf 8151/6306/7250
vfv 1294/1610

n a d (rép niger) female 39 yr 19.07.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PIII (2 alive), total post **IBa** urine intrinsic_stress incontinence grade III, leaking urine whilst lying/sitting/standing/walking/no spontaneous miction following multiple repair 25.9.89 to 18.10.07, married 27 yr ago pre (men arche 1 yr later), still living with husband, normal menstruation, no (h/o) drop foot, no rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter /**wide** pubic arch 95°, ar pos, deformed euo drawn inside, 2° cervix prolapse up to vulva; euo/c 0.5 cm vagina shortening, rectocele EUO/BW 12 cm, good elevation, euo/b 0.2 cm, i/v 5 cm 145.0 cm

operation: urethra rhaphy, para-euo fixation + **dehiscient perineal body repair**

duration: 40 min healing 85% continence 70%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

wide H incision, sharp dissection of cervix from bladder, excision of scar tissue, urethra rhaphy over 2 cm by serafir, bilateral fixation of pcf onto ara-euo symphysis by 1x serafit each side, now euo/b 2.4 cm, **no** urine thru euo on rest/cough/pressure, triple fixation of foley ch 18, avw closure by fixation of "avw"/cervix "advancement" flap onto para-euo symphysis by 1x seralon each side; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 2.4 cm (**urethralization_compression**)

normal bladder capacity (longitudinal diameter 12-2.4 = 9.5 cm)

good position of uv-junction **against** middle third of symphysis

normal-width 2.5 cm poor-quality urethra_euo in anatomic position

transverse incision pvw/skin junction, repair of completely **dehiscient** perineal body by 3x serafit, perineum well adapted, check on hemostasis now i/v 8 cm

RR

preanesthesia: 130/90 mm Hg

5': 130/80

10': 130/80

postoperation: 130/80

pt 222

katsina mdg

vvf 8152/2788/./3389

inoperable IIBb/subtotal bladder loss

rvf

b m g (jigawa)

female

46 yr

19.07.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PIII (0 alive), **new slit-like** 1.5x0.5 cm urethrovesicovaginal fistula type **IIBb**, still living with husband, no menstruation, rvf (zaria) **healed**, at last assessment 26.2.00 fistula closed but inoperable incontinence after multiple repairs 22.6.94 to 15.2.96; ? ap diameter?/narrow pubic arch 70°, **severe funnel-shape vagina stenosis/shortening**
euo/f 0 cm, f/v 0 cm, i/v 4 cm 150.0 cm

operation: assessment **inoperable IIBb**

duration: 10 min

healing

continence

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

everything fixed, direct longitudinal bladder diameter 4 cm
from “**inoperable**” it has become really **inoperable**
at last assessment 26.2.00 already **inoperable** postrepair incontinence

RR

preanesthesia: 150/90 mm Hg

5': 140/90

10': 140/80

postoperation: 130/80

pt 223
pt

katsina mdg

vvf 053

**PV (0 alive) history and follow-up for review
extensive obstetric trauma delivery I**

vvf 4041/.5441
rvf 508/543

l l t (katsina)

female

28 yr

19.07.11

surgeon: dr idris halliru

assistant: gambo lawal

diagnosis: PV (0 alive), post **extensive IIAa** delivery total urine intrinsic_stress incontinence grade III, leaking urine whilst lying/sitting/standing/walking + spontaneous miction for 1 yr which started immediately following obstructed last labor for < 1 day, at home SB male, married 15 yr ago pre(menarche 3 mth later), not living at her husband, no menstruation, drop foot R (grade 3-4) and L (grade 3), rvf/sphincter ani **healed**, no yankan gishiri, no h/o eclampsia; normal ap diameter/wide pubic arch 90°, major pcm loss **open** urethra_euo complete both urine/(stool) **continence** till PV euo/bw 13 cm, poor elevation, euo/b 2, i/v 10 cm 151.0 cm

operation: bilateral pcf fixation

duration: 30 min

healing 95% continence 90%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

gv/ **no** leakage but total intrinsic_stressincontinence
transverse incision at 2 cm from euo, sharp dissection, bilateral fixation of pc fascia onto paraurethra atf by serafit, **no** urine thru suture line/euo on rest/cough/pressure, ballooning of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 13 cm, good anterior elevation, euo/b 3 cm
normal bladder capacity (longitudinal diameter 13-3 = 10 cm)
good position of uv-junction **against** middle third of symphysis
normal-width 3 cm good-quality urethra_euo in anatomic position

RR

preanesthesia: 120/70 mm Hg

5': 120/70

10': 120/70

postoperation: 120/70

pt 224
Pt

katsina mdg vvf 054
+ 5x operation gombe

vvf 7904
vvf 3916/4199

f m m (gombe)

female

34 yr

19.07.11

surgeon: dr idris halliru

assistant: gambo lawal

diagnosis: PIII (0 alive), post **extensive IIBa** delivery total urine intrinsic_stress incontinence grade III, leaking urine whilst lying/sitting/standing/walking + spontaneous miction following multiple repairs 30.5.97 to 24.7.10, still living with husband, normal menstruation but not every month, drop foot L (grade 4); normal ap diameter/pubis arch 85°, operated 5x (misau/azare/bauchi), slight vagina stenosis, cervix opening **not** identified
euo/bw 11 cm, good elevation, euo/b 1.9 cm, i/v 8 cm 150.5 cm

operation: bilateral pcf fixation as **10th operation**

duration: 30 min

healing 85% continence 60%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision at fistula edge, sharp dissection, bilateral pc fascia fixation onto paraurethra atf by serafit, **no** urine thru euo on rest/cough/pressure, foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 11 cm, good anterior elevation, euo/b 2.1 cm
normal bladder capacity (longitudinal diameter 11-2.1 = 9 cm)
good position of uv-junction **against** middle third of symphysis
normal-width 2 cm poor-quality urethra_euo in anatomic position

RR
preanesthesia: 130/80 mm Hg
5': 120/70
10': 120/70
postoperation: 120/70

pt 225
pt

katsina mdg
new leakage

vvf 055
vvf 7843

f a k (katsina)

female

14 yr

19.07.11

surgeon: dr said ahmad

assistant: gambo lawal

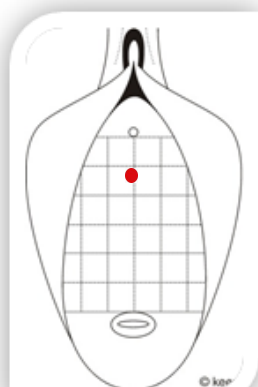
diagnosis: P0, post **IIBa** urine intrinsic_stress incontinence grade II, leaking urine whilst standing/walking but not whilst lying/sitting + spontaneous miction for 2 mth following period of high fever, following continent urethra reconstruction after which she was ok for 1 yr, not living with husband, normal menstruation; normal ap diameter/wide pubic arch 90°, ar pos, cervix mobile
euo/bw 12 cm, moderate elevation, euo/b 2cm, i/v 11 cm 164.0 cm

operation: uvvf-repair, euo-rhaphy + fixation

duration: 60 min healing 90% continence 85%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision at 2 cm from euo, at sharp dissection/excision of redundant avw bladder traumatized, tension-free transverse bladder/urethra closure by single layer of inverting serafit, euo-rhaphy, bilateral pcf fixation, **no** urine thru suture line/euo on rest/cough/pressure, foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 11 cm, good anterior elevation, euo/b 2.2 cm normal bladder capacity (longitudinal diameter 12-2.2 = 10 cm)
good position of uv-junction **against** middle third of symphysis
normal-width 2 cm good-quality urethra_euo in anatomic position



iatrogenic 0.5 cm 0

RR
preanesthesia: 130/80 mm Hg
5': 120/70
10': 120/70
postoperation: 120/70

pt 226
pt

katsina mdg
second "obstetric" fistula

vvf 056
vvf 5151

m y d (rép niger)

female

25 yr

19.07.11

surgeon: dr said ahmad

assistant: gambo lawal

diagnosis: PI/II (0 alive), minute < 0.1 cm 0 urethrovesicovaginal fistula type **IIAa** midline, leaking urine for 4 mth which started following period of lower abdominal pain/fever ("miscarriage", at home sb male), married 13 yr ago pre(menarche 1 yr later), still living with husband, normal menstruation, drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, eclampsia yes; normal ap diameter/pubis arch 85°, ar pos, cervix opening not identified, **open** euo with stress incontinence
euo/f 2 cm, f/c"v 2 cm, i/v 9 cm

148.5 cm

operation: uvvf-repair, euo rhaphy + pcf fixation

duration: 60 min

healing

continence

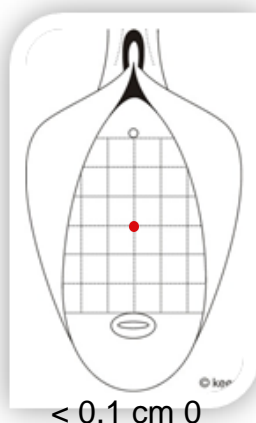
anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision thru fistula, sharp dissection, tension-free transverse bladder/urethra closure by single layer of inverting serafit, euo-rhaphy, bilateral fixation of pcf, **no** urine thru suture line/euo on rest/cough/pressure, foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 11 cm, good anterior elevation, euo/b 2.2 cm

normal bladder capacity (longitudinal diameter 111-2.2 = 9 cm)

good position of uv-junction **against** middle third of symphysis

normal-width 2 cm good-quality urethra_euo in anatomic position



RR
preanesthesia: 120/70 mm Hg
5': 120/70
10': 120/70
postoperation: 120/70

pt 228

katsina mdg
anterior trauma

cath 1371

h g j (katsina)

female

42 yr

19.07.11

diagnosis: PXV (5 alive), \pm 4 cm 0 **necrotic** urethrovesicovaginal fistula type **IIAa**, **leaking urine for 5 days** which started immediately following sth-cs bco obstructed last labor for 4 days, sb male, married 30 yr ago pre(menarche 1 yr later), still living with husband, no menstruation, drop foot R (grade 3) and L (grade 3-4), no rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/pubis arch 85°, ar pos
euo/f 2.5cm, f/c 1 cm 147.0 cm

19.07.11 foley ch 18; free urine flow, euo/bw 12 cm, moderate anterior elevation, euo/b 2 cm
normal bladder capacity (longitudinal diameter 12-3 = 10 cm)
acceptable position uv-junction **against** middle/caudad third of symphysis
normal-width 2 cm good-quality urethra_euo in anatomic position
probably it will not heal since **deep necrosis**



4 cm 0

pt 229

katsina mdg

vvf 8153

span too wide; posterior trauma

b b j (katsina)

female

25 yr

20.07.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PV (3 alive), cystocele_ **massive** 3° cervix prolapse_rectocele without genuine stress incontinence, something coming out of vagina for 2 yr that started spontaneously following obstructed last labor for 1 day, at home live male, married 12 yr ago pre(menarche 1 mth later), still living with husband, normal menstruation, drop foot R (grade 5) and L (grade 5), no vvf/rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/**wide** pubic arch 100°, ar pos, large decubitus in front of anterior cervix
euo/c 10 cm **never** leaking urine **narrow** urethra_euo in anat pos
no objective stress incontinence (also not after reduction)
euo/bw 17 cm, poor elevation, euo/b 1.4 cm, i/v 13 cm 170.0 cm

operation: cervix suspension at L

duration: 15 min (**step-by-step teaching**) healing 85% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

small avw incision avw ruga fold with transverse extension up to cervix, sharp dissection to create wound area/surface, paravesical space free, fixation of cervix (with adherent pc fascia) onto L superior pubic bone/pc_ ilc_iom/atf/atl by 2x seralon, euo/b 2.1 cm, **no** urine thru euo on rest/cough/pressure, foley ch 18, check on hemostasis; free clear urine flow, euo/bw 17 cm, good elastic anterior elevation at L, rotational descent at R, euo/b 2.1 cm (**re-urethralization**) good cervix fixation
increased bladder capacity (longitudinal diameter 17-2.1 = 15 cm)
good position of uv-junction **against** middle third of symphysis
narrow 2 cm good-quality urethra_euo in anatomic position
she may need longitudinal fascia repair/rhaphy as **second stage** since cystocele +++

RR

preanesthesia: 180/100 mm Hg

5': 160/100

10': 160/90

postoperation: 150/80

pt 230
pt
pt

katsina
third now traumatic fistula

vvf 8154
vvf 5844
vvf 7879

r l m (katsina)

female

26 yr

20.07.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PIII (0 alive), multiple lacerations/fistulas in neourethra over 2.5 cm type **IIb**, leaking urine for 3 mth which started immediately following **rta** (or rough sex), married 13 yr ago pre(menarche 2 days later), not living with husband, no menstruation, drop foot R (grade 3-4) and L (grade 4-5), no rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/pubis arch 85°, anal reflex pos, cervix fixed/retracted midline **completely ok** until rta euo/f 0.2 cm, f/c 3 cm, i/v 12 cm 149.0 cm

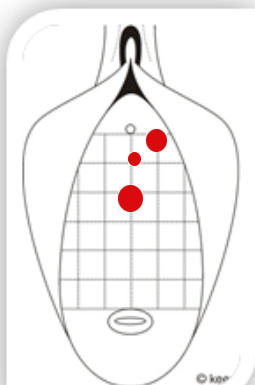
operation: **complicated** continent urethra reconstruction

duration: 45 min

healing 75% continence 70%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

re-episiotomy, u incision around euo with longitudinal extension thru all 3 fistulas, sharp dissection/mobilization of (para)urethra tissue, excision of scar tissue +, tension-free longitudinal urethra reconstruction with repositioning of uv-junction over 2.5 cm by single layer of inverting serafit, bilateral fixation of pcf onto paraurethra atf/periurethra fascia by 1x sedrafit each side securing urethra in anatomic position, euo/b 2.5 cm, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, bilateral fixation of avw/pcf onto paraurethra symphysis by 1x seralon each side, longitudinal avw adaptation by 2x everting seralon pulling labia towards midline, check on hemostasis, skin closure; free urine flow, euo/bw 14 cm, good anterior elevation, euo/b 2.5 cm normal bladder capacity (longitudinal diameter 14-2.5 = 11.5 cm) good position of uv-junction **fixed against** middle third of symphysis normal-width 2.5 cm poor-quality scarred urethra_euo in anatomic position the **problem: scar tissue ++**



multiple 2.5 cm trauma

RR
preanesthesia: 120/70 mm Hg
5': 120/70
10': 120/70
postoperation: 120/70

pt 231
pt

katsina
inoperable IIAb

vvf 8155
rvf 452/.549

a a g (rép niger)

female

46 yr

20.07.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: **PI, totally mutilated inoperable** 4 cm 0 urethrovesicovaginal fistula type **IIAb** with circumferential defect, **totally mutilated** ± 5 cm 0 rectovaginal fistula type **la**, leaking urine/passing of stools per vaginam for 28 yr that started immediately following obstructed labor for 2 days, in hospital sb female, married 33 yr ago pre(menarche 4 mth later), not living with husband, menopause 2 yr ago, drop foot R (grade 4-5), no yankan gishiri; eclampsia yes; small ap diameter/narrow pubic arch 75°, moderate vagina stenosis, operated 1x (damagaram), major atf/atl + pc_io_ilc_iscm loss + ssl_pm trauma
euo/f 2 cm, f" c" 0, ab7/au 2 cm, a/f 6 cm, i/v 8 cm 148.5 cm

operation: assessment of both **inoperable type II Aa/la fistulas**

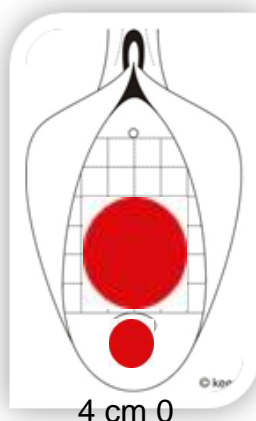
duration: 15 min

healing

continence

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

mutilated 4 cm 0 urethrovesicovaginal fistula with bilateral ureter prolapse; everything fixed so **inoperable IIAb**
4 cm 0 proximal rvf with sigmoid prolapse + small 0.5 cm 0 rvf 1.5 cm distally midline proximally from rvf; even if sigmoid fixed to cover rvf, still small rvf so **inoperable la**



RR
preanesthesia: 150/90 mm Hg
5': 140/80
10': 140/80
postoperation: 140/80

pt 233

katsina mdg

vvf 057

anterior trauma; would have healed by catheter

s u d (katsina)

female

35 yr

20.07.11

surgeon: dr idris halliru

assistant: gambo lawal

diagnosis: PXI (6 alive), retracted ± 0.1 cm 0 urethrovesicovaginal fistula type **IIAa** at midline, **leaking urine for 58 days** which started immediately following obstructed last labor for 1 day, at home sb female, married 22 yr ago pre (menarche 2 mth later), still living with husband, no menstruation, no drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, yes eclampsia; normal ap diameter/pubis arch 85° , ar pos, cervix fixed, obesity ++++ euo/f 3 cm, f/c 3 cm, i/v 14 cm 149.0 cm

operation: uvvf-repair

duration: 30 min

healing 95% continence 95%

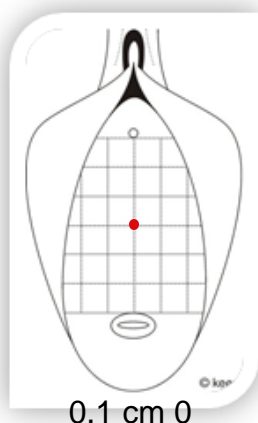
anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision at fistula edge, sharp dissection, tension-free transverse fascia repair with transverse bladder/urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis free urine flow, euo/bw 16 cm, good anterior elevation, euo/b 2.8 cm

normal bladder capacity (longitudinal diameter $16 - 2.8 = 13$ cm)

good position of uv-junction **against** middle third of symphysis

normal-width 3 cm good urethra_euo in anatomic position



	RR
preanesthesia:	130/80 mm Hg
5':	130/80
10':	130/80
postoperation:	130/80

pt 234

katsina mdg
total circumferential trauma

cath 1372
rvf

a a m g (katsina)

female

17 yr

20.07.11

diagnosis: PI (0 alive), \pm 4 cm 0 urethrovesicovaginal fistula type **IIAb** with circumferential defect, **leaking urine for 16 days** which started immediately following cesarean section bco obstructed labor for 2 days, sb male, married 3 yr ago post (menarche 6 mth earlier), not living with husband, no menstruation, drop foot R (grade 3) and L (grade 3), **necrotic** proximal pvw, no yankan gishiri, no eclampsia; normal ap diameter/pubis arch 85°, ar pos, but stool/flatus incontinence, cervix fixed
euo/f 1 cm, f/c 1 cm 146.0 cm

20.07.11 foley ch 18 in situ since cs; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 1 cm
normal bladder capacity (longitudinal diameter 12-1 = 11 cm)
poor position of uv-junction **against** caudad third of symphysis
normal-width 1 cm medium-quality urethra_euo in anatomic position
probably it will **not** heal but since draining well via catheter it is left



4 cm 0

pt 235

katsina mdg

vvf 8157

span too wide; posterior trauma; creation of real wound area surface

h a b d (rép niger)

female

54 yr

21.07.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PX (2 alive), cystocele_3° cervix prolapse_rectocele without genuine stress incontinence, something coming out of vagina for 30 yr that started spontaneous following third labor for 1 day, at home live male, married 40 yr ago post(menarche 1 yr earlier), still living with husband, menopause 7 yr ago, no drop foot R (grade 5) and L (grade 5), no vvf/rvf, no yankan gishiri, no eclampsia; normal ap diameter/**wide** pubic arch 95°, ar pos, 1.5 cm 0 decubitus ulcer anterior cervix
euo/c 7 cm **never** leaking urine **narrow** urethra_euo in anat pos
no objective stress incontinence (also not after reduction)
euo/bw 18 cm, poor elevation, euo/b 1.8 cm, i/v 12 cm 150.0 cm

operation: cervix suspension at L

duration: 10 min (**step-by-step teaching**) healing 95% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

small avw incision avw ruga fold with transverse extension up to cervix, sharp dissection to create **real** wound area/surface, paravesical space free, fixation of cervix (with adherent pc fascia) onto L superior pubic bone/pc_ilc_iom/atf/atl by 2x seralon, euo/b 1.8 cm, **no** urine thru euo on rest/cough/pressure, foley ch 18, check on hemostasis; free clear urine flow, euo/bw cm, good elastic anterior elevation at L, rotational descent at R and euo/b 1.8 cm (**re-urethralization**) good cervix fixation
increased bladder capacity (longitudinal diameter 18-1.8 = 16 cm)
acceptable position of uv-junction **against** middle/caudad third of symphysis
narrow normal-width 2 cm good-quality urethra_euo in anatomic position

RR

preanesthesia: 130/80 mm Hg

5': 130/80

10': 130/80

postoperation: 130/80

pt 236
pt 237
pt

katsina

severe surgical trauma; new iatrogenic fistula

vvf 8158
vvf 7461
rvf 1033/946

r a g (adamawa)

female

23 yr

21.07.11

surgeon: kees waaldijk

assistant: jamila habibu

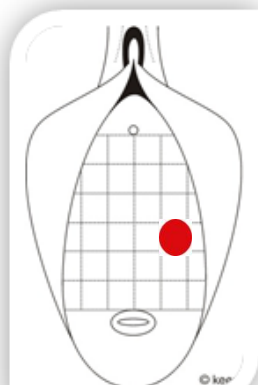
diagnosis: PII (0 alive), **mutilated extensive** \pm 0.5 cm 0 urethrovesicovaginal fistula **IIAb** at L, leaking urine for 1 yr after stress incontinence operation 23.4.10 that started after incontinence operation (acquire) married 10 yr ago post (menarche 2 mth earlier), still with husband, normal menstruation, bilateral drop foot R (grade 5) and L (grade 5), no yankan gishiri, eclampsia yes delivery I; normal ap diame ter/**wide** pubic arch 90°, ar pos, bilateral pc_io_ilc_iscm + atf/atf loss + ssl trauma, "operated" 1x both (kalchingi_ti) though fully stool/flatus continence minimal anterior sphincter gap + dehiscence perineal body, actually, **nice healing** of **mutilated** sphincter ani euo/f 1.5 cm, f/c 1 cm, i/v 9 cm 150.0 cm

operation: excision of mutilation tissue, uvvf-repair etc, sphincter ani repair etc

duration: 40 min (**step-by-step teaching**) healing **both** 90% continence u 85%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

excision of **mutilated** tissue, transverse incision thru repair scar, sharp dissection, excision of all **scar** tissue ++, bilateral (re)fixation of medium-quality pc fascia onto paraurethra_euo atf by 2x serafit with transverse fistula closure, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation foley ch 18, transverse avw/avw_cervix adaptation by 2x everting seralon; free urine flow, euo/bw 12 cm, good elevation, euo/b 1.7 cm normal bladder capacity (longitudinal diameter 12-1.7 = 10.5 cm) poor position of uv-junction **fixed against** caudad third of symphysis normal-width 1.5 cm medium-quality urethra_euo in anatomic position incision at anterior anus, minimal sharp dissection, end-to-end sphincter ani reconstruction by 2x serafit, perineal body repair with re-union of bulbocavernosus/transversus perinei muscles by 2x serafit, check on hemostasis, perineum well adapted



extensive 0.5 cm 0

RR
preanesthesia: 120/70 mm Hg
5': 120/70
10': 120/70
postoperation: 120/70

pt 237
pt 236
pt

katsina

rvf 1033/946
vfv 8158
vfv 7461

severe surgical trauma; new iatrogenic fistula

r a g (adamawa)

female

23 yr

21.07.11

surgeon: kees waaldijk

assistant: jamila habibu

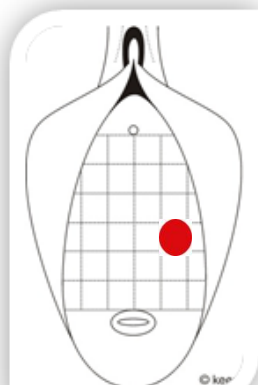
diagnosis: PII (0 alive), **mutilated extensive** \pm 0.5 cm 0 urethrovesicovaginal fistula **IIAb** at L, leaking urine for 1 yr after stress incontinence operation 23.4.10 that started after incontinence operation (acquire) married 10 yr ago post (menarche 2 mth earlier), still with husband, normal menstruation, bilateral drop foot R (grade 5) and L (grade 5), no yankan gishiri, eclampsia yes delivery I; normal ap diame ter/**wide** pubic arch 90°, ar pos, bilateral pc_io_ilc_iscm + atf/atf loss + ssl trauma, "operated" 1x both (kalchingi_ti) though fully stool/flatus continence minimal anterior sphincter gap + dehiscence perineal body, actually, **nice healing** of **mutilated** sphincter ani euo/f 1.5 cm, f/c 1 cm, i/v 9 cm 150.0 cm

operation: excision of mutilation tissue, uvvf-repair etc, sphincter ani repair etc

duration: 40 min (**step-by-step teaching**) healing **both** 90% continence u 85%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

excision of **mutilated** tissue, transverse incision thru repair scar, sharp dissection, excision of all **scar** tissue ++, bilateral (re)fixation of medium-quality pc fascia onto paraurethra_euo atf by 2x serafit with transverse fistula closure, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation foley ch 18, transverse avw/avw_cervix adaptation by 2x everting seralon; free urine flow, euo/bw 12 cm, good elevation, euo/b 1.7 cm normal bladder capacity (longitudinal diameter 12-1.7 = 10.5 cm) poor position of uv-junction **fixed against** caudad third of symphysis normal-width 1.5 cm medium-quality urethra_euo in anatomic position incision at anterior anus, minimal sharp dissection, end-to-end sphincter ani reconstruction by 2x serafit, perineal body repair with re-union of bulbocavernosus/transversus perinei muscles by 2x serafit, check on hemostasis, perineum well adapted



extensive 0.5 cm 0

RR
preanesthesia: 120/70 mm Hg
5': 120/70
10': 120/70
postoperation: 120/70

pt 238

katsina mdg

vvf 8159/718/./3708

inoperable post IIAb incontinence

rvf

I b d-m (katsina)

female

40 yr

21.07.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PI (0 alive), **inoperable** total post **extensive IIAb** urine intrinsic_stress incontinence grade III, leaking urine whilst lying/sitting/standing/walking + no spontaneous miction for 25 yr which started immediately following obstructed labor for 2 days, in hospital sb female, married 28 yr ago pre(menarche 8 mth later), not living with husband, normal menstruation, no yankan gishiri, eclampsia yes; ?ap diameter?/narrow pubic arch 60°, severe vagina stenosis/shortening, cervix opening fixed at "vault"
nb spontaneous healing of proximal rvf seen at first examination at 1 mth
multiple repairs 10.9.87 thru 9.11.98 obesity +
euo/bw 12, good elevation, euo/b 2.1 cm, i/v 3 cm 151.0 cm

operation: assessment of **inoperable post IIAb incontinence** **final**

duration: 10 min healing continence

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

euo/bw 12, good elevation, euo/b 2.1 cm, cervix fixed midline vault i/v 3 cm
"normal-width 2 cm poor-quality urethra_euo in "anatomic" position, no bilateral connect ion of pc fascia onto paraurethra atf **everything "healed" but no function**
since everything **fixed** there is nothing we can do

RR

preanesthesia: 130/80 mm Hg

5': 130/80

10': 130/80

postoperation: 130/80

pt 239
pt

katsina mdg

vvf 8160/2708/.5280
rvf 285

a r y-r (katsina)

female

31 yr

21.07.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PI, total post **IIBb** urine intrinsic_stress incontinence grade III, leaking urine whilst lying/sitting/standing/walking following multiple repairs 11.5.94 to 16.10.01, leaking urine for 17 yr which started immediately following obstructed labor for 2 days, in hospital SB male, married 19 yr ago pre(menarche 6 mth later), still living with husband, no menstruation, drop foot R (grade 4-5) and L (grade 4-5); when seen 22/3-94 at 16-day duration poor general condition; **major** bilateral atf/atl + pc_io_ilc_iscm loss + ssl_pm trauma, cervix not identified, vault fixed, **no** bilateral connection pcf onto paraurethra atf, **empty pelvis** good perineal body euo/bw 13 cm, good elevation, euo/b 2.5 cm, i/v 7 cm 149.0 cm

operation: paraurethra pcf/avw fixation, urethra rhaphy + para-euo fixation

duration: 40 min healing 85% continence 60%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

gv/ **no** leakage but total urine intrinsic incontinence

bilateral transverse avw incision, sharp dissection, excision of tissue covering pubic bones, bilateral fixation of pcf/avw onto paraurethra atf by 2x seralon each side, still urine + from euo on cough, u incision at euo, sharp dissection, urethra rhaphy over 2 cm distal urethra using paraurethra tissue, still urine thru euo on cough, bilateral fixation of paraurethra tissue/avw onto par-euo symphysis by 1x seralon each side, **no** urine thru suture line/euo on rest/cough/pressure, foley ch 18; free urine flow, euo/bw 14 cm, good anterior elevation, euo/b 2.8 cm **last resort** but it may work

normal bladder capacity (longitudinal diameter 14-2.8 = 11 cm)

good position of uv-junction **against** middle third of symphysis

normal-width 3 cm good-quality urethra_euo in anatomic position

the problem: continuous traction/pull onto posterior urethra by fixed vault though now a bit neutralized

RR

preanesthesia: 130/80 mm Hg

5': 120/70

10': 120/70

postoperation: 120/70

pt 240

katsina mdg

vvf 8161/7992

additional fixation at R; this is according to master plan; ok at L

h h y (rép niger)

female

16 yr

29.01.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PI (alive), R cervix 2° prolapse/cystocele at R whilst L side nicely healed (**as "ligament" like anticipated**) and more or less in anatomic position following cervix suspension at L 29.01.11, not living with husband, normal menstruation, normal ap diameter/**wide** pubic arch 90°, ar pos, no decubitus ulcer cervix

euo/c 7 cm **only** leaking urine with full bladder

now objective stress incontinence +

euo/bw 18 cm, poor elevation, euo/b 1.5 cm, i/v 11 cm 150.0 cm

operation: cervix suspension at R as **second stage according to master plan**

duration: 10 min (**step-by-step teaching**) healing 95% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

small avw incision R within/parallel to uga folds with transverse extension up to cervix, sharp dissection to create wound area surface, paravesical space free, fixation of cervix (with adherent pc fascia) onto levator ani fascia by 2x seralon sutures thru R superior pubic bone periost/pc_ilc_iom/atf/at, euo/b 2.8 cm, **no** urine thru euo on rest/cough/pressure, foley ch 18, check on hemostasis; free clear urine flow, euo/bw 18 cm, good elastic anterior elevation **both** sides, euo/b 2.8 cm (**re-urethralization**)

increased bladder capacity (longitudinal diameter 18-2.8 = 15 cm)

good position of uv-junction **against** middle third of symphysis good cervix fixation

normal-width 3 cm good-quality urethra_euo in anatomic position

if incontinence (no complaint) persists then for longitudinal fascia repair

RR

preanesthesia: 120/70 mm Hg

5': 120/70

10': 120/70

postoperation: 120/70

pt 241

katsina mdg

vvf 8162/8013

**additional fixation at R; this is according to master plan; ok at L
delivered 3 live infants with prolapse for 12 yr; as well wishes more children**

r s d (rèp niger)

female

27 yr

22.07.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PVI (4 alive), R cervix 2° prolapse/cystocele at R whilst L side nicely healed (**as "ligament" like anticipated**) and more or less in anatomic position following cervix suspension at L 5.2.11, still living with husband, normal menstruation; normal ap diameter/**wide** pubic arch 95°, ar pos, no decubitus ulcer cervix

euo/c79 cm **never** leaking urine **narrow** urethra_euo in anat pos
no objective stress incontinence (also not after reduction)

euo/bw 19 cm, poor elevation, euo/b 1.1 cm, i/v 12 cm 165.0 cm

operation: cervix suspension at R as **second stage according to master plan**

duration: 10 min (**step-by-step teaching**) healing 95% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

small avw incision R within/parallel to uga folds with transverse extension up to cervix, sharp dissection to create wound area surface, paravesical space free, fixation of cervix (with adherent pc fascia) onto levator ani fascia by 2x seralon sutures thru R superior pubic bone periost/pc_ilc_iom/atf/at, euo/b 2.3 cm, **no** urine thru euo on rest/cough/pressure, foley ch 18, check on hemostasis; free clear urine flow, euo/bw 18 cm, good elastic anterior elevation **both** sides, euo/b 2.3 cm (**re-urethralization**)

increased bladder capacity (longitudinal diameter 18-2.3 = 15.5 cm)

good position of uv-junction **against** middle third of symphysis good cervix fixation

normal-width 2.5 cm good-quality urethra_euo in anatomic position

RR

preanesthesia: 120/70 mm Hg

5': 120/70

10': 120/70

postoperation: 120/70

**total circumferential trauma; from now on even better pcf fixation to atf
in order to fill up paravesical space better to prevent
upward/anterior pull/traction by bladder onto posterior urethra**

e t k (kaduna)

female

16 yr

23.07.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PI (0 alive), \pm 3 cm 0 urethrovesicovaginal fistula type **IIAb** with circumferential defect fixed onto cephalad symphysis, **leaking urine for 52 days** which started immediately following cs kachia bco obstructed labor for 2 days in hospital, sb male, married 2 yr ago post(menarche 1 yr earlier), not living with husband, no menstruation, drop foot R (grade 3) and L (grade 3-4), no rvf, no yankan gishiri, no eclampsia; normal ap diameter/pubis arch 85°, ar pos, bilateral atf/atl + pc_ilc_iscm loss, cervix fixed mid line, proximal lpl stricture
euo/f 2.5 cm, f/c 0.5 cm, ab/au 1 cm, i/v 10 cm

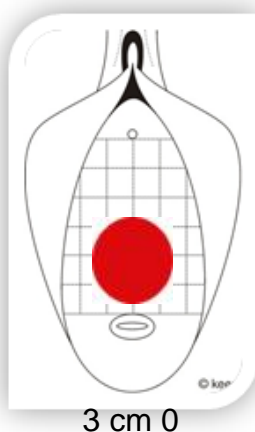
operation: circumferential uvvf-repair + bilateral pcf refixation

duration: 40 min

healing 85% continence 85%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

small episiotomy L, transverse incision thru/at fistula edge, sharp circumferential dissection, advancement/caudad fixation of anterior bladder onto symphysis/urethra, **under some tension** circumferential uvvf-repair by end-to-end vesicourethrostomy by single layer of inverting serafit, bilateral fixation pc fascia to paraurethra_euo atf/symphysis by 2x serafit each side, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 11 cm, good anterior elevation, euo/b 2.0 cm normal bladder capacity (longitudinal diameter 11-2.0 = 9 cm)
acceptable position of uv-junction **fixed against** middle/caudad third of symphysis
“normal-width” 2 cm good-quality urethra_euo in anatomic position
the **problem: continuous traction/pull by fixed cervix**



RR
preanesthesia: 120/70 mm Hg
5': 120/70
10': 120/70
postoperation: 120/70

pt 243

zaria

vvf 515

anterior/iatrogenic trauma; ?ruptured uterus?/?hemorrhage?

m i t (nasarawa)

female

41 yr

23.07.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PX (4 alive), **ragged** ± 4x1.5 cm longitudinal urethrovesicovaginal fistula type **IIAa** midline, leaking urine of 4 mth that started immediately following laparotomy (toto hospital) same day after vaginal delivery for 1 day of sb female, married 26 yr ago post(menarche 2 yr earlier), still living with husband, no menstruation, no h/o drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/pubis arch 85°, ar pos, post cervix fixed midline, obesity + euo/f 3.5 cm, f" c"v 0 cm, i/v 11 cm cm

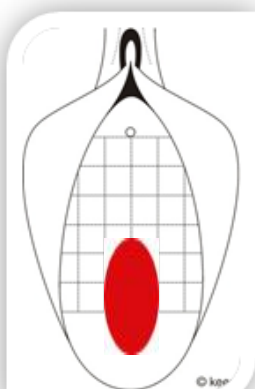
operation: **complicated** tah-uvvf-repair

duration: 40 min

healing 90% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

small episiotomy L, incision at fistula edge, sharp dissection, tension-free longitudinal bladder_urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, longitudinal avw adaptation by 2x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 2.4 cm
normal bladder capacity (longitudinal diameter 12-2.4 = 9.5)
good position of uv-junction **against** middle third of symphysis
normal-width 2.5 cm good-quality urethra_euo in anatomic position



longitudinal 4x1.5 cm

RR
preanesthesia: 130/80 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

anterior/iatrogenic trauma

z h i (kaduna)

female

37 yr

23.07.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PXI (7 alive), minute < 0.1 cm (\pm 1.5 cm) 0 sth-cs-vesicocervicovaginal fistula type I at midline, leaking urine for 4 mth which started immediately following supracervical hysterectomy_cs (cervix + canal intact) bco last obstructed labor for 1 days, sb male, married 24 yr ago pre(menarche 4 mth later), still living with husband, no menstruation, drop foot R (grade 4) and L (grade 4), no rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/pubis arch 85°, cervix "fixed" midline **+ normal miction**
 euo/f 8 cm, f/c 0 cm, i/v 12 cm obesity +

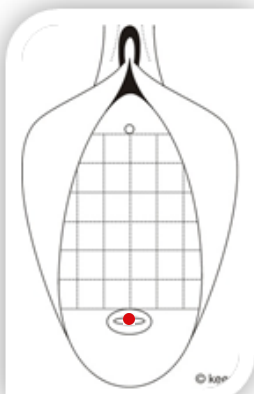
operation: sth-cs-vfv-repair

duration: 25 min

healing 95% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

fistula demonstrated by gv, transverse incision thru fistula/cervix, sharp dissection, excision of scar tissue ++, now fistula 1.5 cm 0, tension-free longitudinal bladder closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw/cervix adaptation by 2x everting seralon, hemostasis check; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 2.5 cm normal bladder capacity (longitudinal diameter 12-2.5 = 9.5 cm good position of uv-junction **against** middle third of symphysis normal-width 2.5 cm good-quality urethra_euo in anatomic position



minute < 0.1 (1.5) cm 0

RR
 preanesthesia: 130/80 mm Hg
 5': 130/80
 10': 130/80
 postoperation: 130/80

pt 245

zaria

vvf 517

anteriobilateral trauma; what ?obstetric care?

z a a b (kaduna)

female

23 yr

23.07.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PVII (2 alive), \pm 0.5 cm 0 urethrovesicovaginal fistula type **IIAa** slightly at R with **b characteristics** fixed to symphysis within 6x1 cm pcf trauma, **leaking urine for 58 days** which started immediately following cs bco obstructed last labor for 4 days (1 day at home, 1 day at herbalist hospital eclampsia, 1 day general hospital head out/no doctor, 1 day priv clin cs), sb female, married 9 yr ago pre(menarche 5 mth later), still living with husband, no menstruation, drop foot R (grade 2) and L (grade 4), no rvf, no yankan gishiri, eclamp sia yes; normal ap diameter/wide pubic arch 90°, ar pos, bilateral atf/atl + pc_ilc_iscm trauma, cervix "mobile", euo/f 3 cm, f/c 3 cm, ab/au xx cm, i/v 12 cm **necrosis \pm**

operation: uvvf-repair + transverse pcf repair/bilateral refixation

duration: 20 min

healing 85% continence 95%

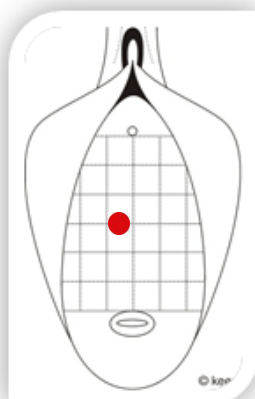
anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

debridement \pm , large transverse incision at fistula edge, sharp dissection, tension-free transverse fascia repair/bilateral fixation onto paraurethra_euo atf/symphysis by 2x serafit each side with fistula closure in the process. **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x evert ing seralon, check on hemostasis, skin closure; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 2.7 cm

normal bladder capacity (longitudinal diameter 12-2.7 = 9.5 cm)

good position of uv-junction **fixed against** middle third of symphysis

normal-width 2.5 cm good-quality urethra_euo in anatomic position



0.5 cm 0

RR
 preanesthesia: 120/70 mm Hg
 5': 120/70
 10': 120/70
 postoperation: 120/70

pt 246

zaria
anterior trauma

vvf 518

m a s (kaduna)

female

15 yr

24.07.11

surgeon: kees waaldijk

assistant: kabir lawal

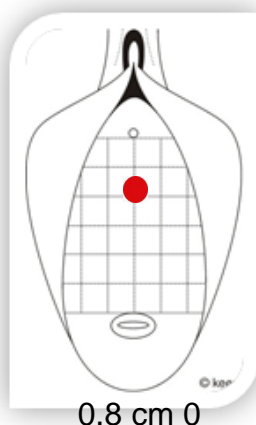
diagnosis: PI (0 alive) ± 0.8 cm 0 urethrovesicovaginal fistula type **IIAa** at midline within 4x1 cm transverse pcf defect/avw trauma, **leaking urine for 60 cdays** which started immediately following cs bco obstructed labor for 4 days (1 day gida eclampsia, 1 day gen hosp, 1 day priv hosp, cs 4th day), sb female, married 2 yr ago pre(menarche 1 mth later), still living with husband, no menstruation, drop foot R (grade 4) and L (grade 4), no rvf, no yankan gi shiri, eclampsia yes; normal ap diameter/pubic arch 85°, ar pos, cervix fixed midline **wide open** euo pulled post inside euo/f 2 cm, f/c 4 cm, i/v 12 cm cm

operation: uvvf-repair + transverse fascia repair/bilateral para-euo fixation

duration: 25 min healing 95% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

small episiotomy L, transverse incision thru fistula/avw_pcf trauma, sharp dissection, tension-free transverse pc fascia repair with bilateral fixation onto para-euo atf with normalization of euo and fistula closure in the process by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 1.8 cm normal bladder capacity (longitudinal diameter 12-1.8 = 10 cm) poor position of uv-junction **against** caudad third of symphysis normal-width 2 cm good-quality urethra_euo in anatomic position



RR
 preanesthesia: 120/70 mm Hg
 5': 120/70
 10': 120/70
 postoperation: 120/70

pt 247

zaria
anterior trauma

cath 78

f b r f d z city

female

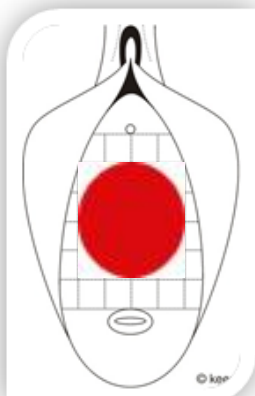
16 yr

18.07.11

diagnosis: PI (0 alive), \pm 4 cm 0 "**necrotic**" urethrovesicovaginal fistula, **leaking urine for 5 days** which started 5 days following obstructed labor for 1 day, at home sb male, married 2 yr ago post(menarche 10 mth earlier), still living with husband, no menstruation, no drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no eclampsia; normal ap diameter/pubis arch 85°, ar pos
euo/f 1 cm, f/c 1 cm

18.07.11 foley ch 18; free urine flow, euo/bw 14 cm, good anterior elevation and euo/b 1 cm
normal bladder capacity (longitudinal diameter 14-1 = 13 cm)
poor position of uv-junction **against** caudad third of symphysis
normal-width 1 cm medium-quality urethra_euo in anatomic position

24.07.11 not leaking at all insp/ minute fistula at distal tip **healing** avw
this will heal by catheter now 16 days post partum



4 cm 0 avw trauma

pt 248

zaria
anterior trauma

cath 79

u a f (kaduna)

female

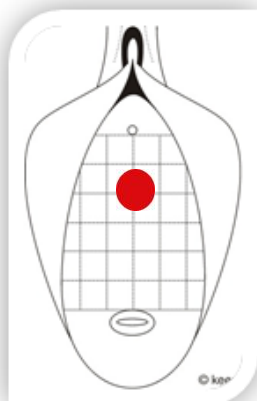
17 yr

23.07.11

diagnosis: PII (1 alive), \pm 1 cm 0 urethrovesicovaginal fistula type **IIA** midline, **leaking urine for 40 days** which started immediately following sth-cs bco last obstructed labor for 4 days (3 days gida, 1 day hosp, next day cs), sb female, married 4 yr ago post(menarche 2 mth ear lier), not living with husband, no menstruation, drop foot R (grade 2) and L (grade 2), no rvf, no yankan gishiri, eclampsia yes; normal ap diameter/ pubic arch 85° , ar pos, cervix fixed, **cannot stand/walk**
euo/f 2 cm, f/c 4 cm

23.07.11 foley ch 18; free urine flow, euo/bw 10 cm, good anterior elevation and euo/b 1.5 cm
normal bladder capacity (longitudinal diameter 10-1.5 = 8.5 cm)
poor position of uv-junction **against** caudad third of symphysis
normal-width 1.5 cm good-quality urethra_euo in anatomic position

24.07.11 draining via catheter/legs **mobilize patient by all means**
there is still slight chance of healing



1.5 cm 0

pt 249

kano
anterior trauma

cath 931

z a s (katsina)

female

23 yr

12.09.11

diagnosis: PIII (all alive), overflow-intrinsic/stress incontinence grade III, **leaking urine whilst lying/sitting/standing/walking + normal miction for 12 days** which started **2 days** following obstructed last labor for 4 hours, in hospital daura live female, married 7 yr ago post(menarche 3 yr earlier), still living with husband, no menstruation, no drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no eclampsia; normal ap diameter/wide pubic arch 90°, ar pos **objective stress ++**
no visible avw trauma 157 cm

12.09.11 avw bulging, no suprapubic mass, foley ch 18; free urine flow, euo/bw 13 cm, poor anterior elevation, euo/b 1 cm (**vesicalization**)
normal bladder capacity (longitudinal diameter 13-1 = 12 cm)
poor position of uv-junction **against** caudad third of symphysis
normal-width 1 cm good-quality urethra_euo in anatomic position

pt 250

kano
anterior trauma

cath 932

h s t w (kano city)

female

15 yr

12.09.11

diagnosis: PI (0 alive), overflow_intrinsic/stress incontinence grade III, **leaking urine whilst lying/standing/walking + no spontaneous miction for 15 days** which started immediately following obstructed labor for 2 days, in mmsh hospital sb male, married 2 yr ago post(menarche 2 mth earlier), not living with husband, no menstruation, no drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri; normal ap diameter/pubis arch 85°, ar pos avw bulging **objective stress +++** obesity + 150 cm

12.09.11 small suprapubic mass, avw bulging and bladder overdistended (euo/bw 17 cm), poor elevation after draining < 750 ml urine, euo/b 1 cm foley ch 18, free urine flow **increased** bladder capacity (longitudinal diameter 17-1 = 16 cm, **atonic bladder**) poor position of UV-junction **against** caudad third of symphysis normal-width 1 cm good-quality urethra_euo in anatomic position

pt 251

kano
anterior trauma

cath 933

b m f_k (kano city)

female

14 yr

04.09.11

diagnosis: PI (0 alive), total intrinsic_stress incontinence grade III, **leaking urine whilst lying/sitting/standing/walking + no spontaneous miction for 8 days** which started immediately following obstructed labor for 1 day, in hospital mmsh sb female, married 1 yr ago pre(menarche 5 mth later), not living with husband, no menstruation, no drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, eclampsia yes; normal ap diameter/pubis arch 85°, ar pos **objective stress ++**
traumatized euo 154 cm

04.09.11 foley ch 18; free urine flow, euo/bw 12 cm, good anterior elevation and euo/b 1.5 cm
normal bladder capacity (longitudinal diameter 12-1.5 = 10.5 cm)
poor position of uv-junction **against** caudad third of symphysis
traumatized 1.5 cm poor-quality urethra_euo drawn inside

pt 252

kano mdg
anterior trauma

vvf 4655
cath 934

s h g (bauchi)

female

15 yr

12.09.11

surgeon: kees waaldijk

assistant: binta musa

diagnosis: PI (0 alive), total urine intrinsic_stress incontinence grade III, leaking urine whilst lying/sitting/standing/walking + spontaneous miction for 5 mth which started immediately following obstructed labor for 1 day, in hospital misau sb female, married 1.5 yr ago post(menarche 1 yr earlier), still living with husband, normal menstruation, no (h/o) drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, eclampsia yes; normal ap diameter/wide pubic arch 90°, ar pos, cervix mobile obesity + euo/c 6 cm **wide open** urethra_euo drawn posteriorly inside euo/bw 16 cm, poor elevation, euo/b 1.3 cm, i/v 12 cm 158 cm

operation: longitudinal bladder repair + urethralization

duration: 30 min

healing 95% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

intrinsic incontinence ++ **no** gv check but should have checked since **inflammation ++** transverse curved incision at 2 cm from euo within/parallel to ruga folds, sharp dissection whereby bladder traumatized (or still bladder defect with minute fistula as "healed" by catheter), 5x2 cm median longitudinal fascia defect from cervix up to 2 cm to euo, longitudinal repair/rhaphy of **indurated inflamed** pc fascia at 1-6 cm from euo with longitudinal bladder closure by serafit, now euo/b 3.1 cm, **no** urine thru euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw_pcf/symphysis_avw adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 15 cm, good anterior elevation, euo/b 3.1 cm (**urethralization_compression**)
normal bladder capacity (longitudinal diameter 15-3.1 = 12 cm)
good position UV-junction **against** middle third symphysis
good fascia plate good-quality pcm
normal-width 3 cm good-quality urethra_euo in anatomic position

RR

preanesthesia: 130/80 mm Hg

5': 120/70

10': 120/70

postoperation: 120/70

pt 253

kano mdg

vvf 4666

anterior trauma; genuine incontinence; median pc fascia defect

s i d (kano)

female

24 yr

12.09.11

surgeon: kees waaldijk

assistant: hafsat ibrahim

diagnosis: PV (3 alive), urine intrinsic_stress incontinence grade II-III, leaking urine whilst sitting/standing/walking + normal miction but not whilst lying for 8 mth which started 2 days following obstructed last labor of 1 day, at home live male, married 11 yr ago post(menarche 1 mth earlier), still living with husband, normal menstruation, no (h/o) drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter /pubic arch 85°, ar pos, cervix mobile no improvement by bladder drill euo/c 7 cm **objective** stress ++ normal-width urethra_euo in anat pos euo/bw 15 cm, poor elevation, euo/b 1.6 cm, i/v 12 cm 171 cm

operation: urethralization by longitudinal fascia repair

duration: 20 min (**step.by-.step teaching**) healing 95% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse curved incision at 2 cm from euo within/parallel to ruga folds, sharp dissection, 6x2 cm median longitudinal fascia defect from cervix to 1 cm to euo, longitudinal repair/rhaphy of pc fascia at 1-6 cm from euo by serafit, now euo/b 2.0 cm, **no** urine thru euo on rest/cough/pressure, fixation of fascia onto bilateral paraurethra_euo atf intact, triple fixation of foley ch 18, transverse avw_pcf/symphysis_avw adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 15 cm, good elastic anterior elevation, euo/b 2.5 cm (**urethralization_compression**) normal bladder capacity (longitudinal diameter 15-2.0 = 13 cm) acceptable position UV-junction **against** middle/caudad third symphysis good fascia plate good-quality pcm normal-width 2 cm good-quality urethra_euo in anatomic position

RR

preanesthesia: 140/80 mm Hg

5': 140/80

10': 130/80

postoperation: 130/70

pt 254

kano

mdg

vvf 058

anterior trauma; second obstetric fistula

r h s s a (kano city)

female

24 yr

12.09.11

surgeon: dr idris Suleiman abubakar

assistant: aisha shehu adamu

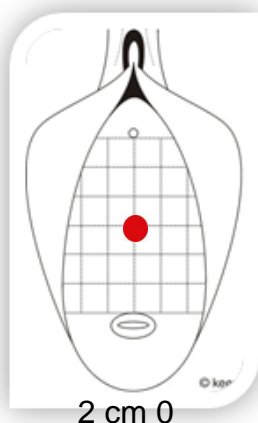
diagnosis: PV (3 alive), \pm 2 cm 0 urethrovesicovaginal fistula type **IIAa** at midline, **leaking urine for 42 days** which started immediately following obstructed last labor for 2 days, at home sb male, married 11 yr ago pre(menarche 3 mth later), still living with husband, no menstruation, drop foot R (grade 4) and L (grade 4), no rvf, no yankan gishiri, no eclampsia; normal ap diameter/pubis arch 85°, ar pos, cervix mobile, successful repair delivery I (mmsh_kees)
 euo/f 3 cm, f/c 3 cm, i/v 11 cm 149 cm

operation: uvvf-repair

duration: 45 min healing 90% continence 80%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

episiotomy L, incision at fistula edge, sharp dissection, tension-free transverse bladder/urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 3x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 16 cm, good anterior elevation, euo/b 3 cm
 normal bladder capacity (longitudinal diameter 16-3 = 13 cm)
 good position of uv-junction **against** middle third of symphysis
 normal-width 3 cm good-quality urethra_euo in anatomic position



RR

preanesthesia: 130/80 mm Hg
 5': 120/70
 10': 110/70
 postoperation: 110/70

pt 255

kano
anterior trauma

mdg

vvf 059

r i l-a (kano city)

female

44 yr

12.09.11

surgeon: dr amir imam yola

assistant: aisha shehu

diagnosis: PXIV (9 alive), \pm 1 cm 0 urethrovesicovaginal fistula type **IIAa** at midline, **leaking urine for 30 days** which started immediately (upon catheter removal 5 days) following obstructed last labor for 3 days, in hospital gaya sb male, married 31 yr ago pre(menarche 1 mth later), still living with husband, no menstruation, no drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no eclampsia; normal ap diameter/pubis arch 85°, ar pos, cervix mobile
euo/f 3 cm, f/c 3 cm, i/v 8 cm 147 cm

operation: uvvf-repair

duration: 25 min healing 90% continence 75%

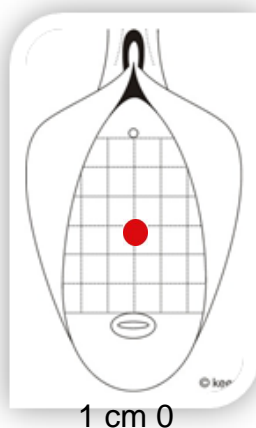
anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

incision at fistula edge, sharp dissection, tension-free transverse bladder/urethra closure by single layer of inverting serafit, **no** urine thru suture line but still **+** thru euo on cough, foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 19 cm, good anterior elevation, euo/b 2.2 cm

increased bladder capacity (longitudinal diameter 19-2.2 = 17 cm)

good position of uv-junction **against** middle third of symphysis

normal-width 2 cm good-quality urethra_euo in anatomic position



	RR
preanesthesia:	160/90 mm Hg
5':	140/90
10':	130/80
postoperation:	130/80

pt 256
pt 257

kano mdg
total circumferential trauma

vvf 4657
rvf 768

m s g (kano city)

female

17 yr

13.09.11

surgeon: kees waaldijk

assistant: binta musa

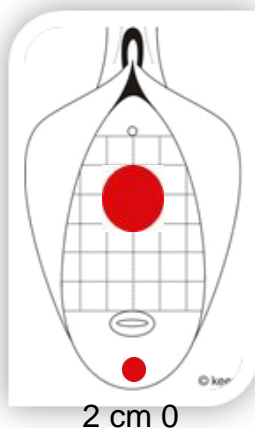
diagnosis: PI (0 alive), large \pm 2 cm 0 urethrovesicovaginal fistula with circumferential defect type **IIBb**, **mutilated** \pm 0.5 cm rectovaginal fistula type **IIAa**, leaking urine/passing stools pv for 10 mth which started immediately following obstructed labor for 4 days, in hospital (1 day) minjibir sb male, married 3 yr ago post(menarche 1 yr earlier), not living with husband, normal menstruation, drop foot R (grade 3-4) and L (grade 3-4), no yankan gishiri, eclampsia yes; normal ap diameter/wide pubic arch 90°, ar pos, bilateral atf/atl + pc_iloc_iscm loss, cervix mobile, rvf-repair 13.4.11 (mmsh_ka), moderate stenosis/shortening
euo/f 1 cm, f/c 2.5 cm, ab/au 0.2 cm, a/f 3 cm, i/v 7 cm 145 cm

operation: circumferential uvvf-repair + bilateral pcf refixation + rvf-repair

duration: 60 min healing **u_s 95_80%** continence **u_s 75_95%**

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

re-episiotomy L, transverse incision thru/at fistula edge, sharp 4/5 circumferential dissection, tension-free 4/5 circumferential uvvf-repair by end-to-end vesicourethrostomy by single layer of inverting serafit, bilateral fixation of pc fascia onto paraurethra_euo atf/symphysis by 2x serafit each side, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon,; free urine flow, euo/bw 10 cm, good anterior elevation, euo/b 1.1 cm normal bladder capacity (longitudinal diameter 10-1.1 = 9 cm) poor position of uv-junction **fixed against** caudad third of symphysis normal-width 1 cm medium-quality urethra_euo in anatomic position incision at rvf edge, sharp dissection, 1.5 cm 0 rectum defect, friable poor-quality rectum tissue, **complicated** tension-free longitudinal rectum closure by double layer of inverting interrupted/continuous serafit, no pvw left, check on hemostasis, skin closure



RR
preanesthesia: 130/80 mm Hg
5': 120/70
10': 110/70
postoperation: 110/60

pt 257
pt 256

kano mdg
total circumferential trauma

rvf 768
vfv 4657

m s g (kano city)

female

17 yr

13.09.11

surgeon: kees waaldijk

assistant: binta musa

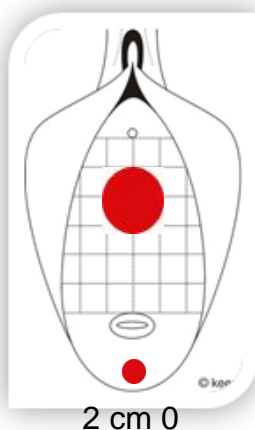
diagnosis: PI (0 alive), large \pm 2 cm 0 urethrovesicovaginal fistula with circumferential defect type **IIBb**, **mutilated** \pm 0.5 cm rectovaginal fistula type **IIAa**, leaking urine/passing stools pv for 10 mth which started immediately following obstructed labor for 4 days, in hospital (1 day) minjibir sb male, married 3 yr ago post(menarche 1 yr earlier), not living with husband, normal menstruation, drop foot R (grade 3-4) and L (grade 3-4), no yankan gishiri, eclampsia yes; normal ap diameter/wide pubic arch 90°, ar pos, bilateral atf/atl + pc_iloc_iscm loss, cervix mobile, rvf-repair 13.4.11 (mmsh_ka), moderate stenosis/shortening
euo/f 1 cm, f/c 2.5 cm, ab/au 0.2 cm, a/f 3 cm, i/v 7 cm 145 cm

operation: circumferential uvvf-repair + bilateral pcf refixation + rvf-repair

duration: 60 min healing **u_s 95_80%** continence **u_s 75_95%**

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

re-episiotomy L, transverse incision thru/at fistula edge, sharp 4/5 circumferential dissection, tension-free 4/5 circumferential uvvf-repair by end-to-end vesicourethrostomy by single layer of inverting serafit, bilateral fixation of pc fascia onto paraurethra_euo atf/symphysis by 2x serafit each side, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon,; free urine flow, euo/bw 10 cm, good anterior elevation, euo/b 1.1 cm normal bladder capacity (longitudinal diameter 10-1.1 = 9 cm) poor position of uv-junction **fixed against** caudad third of symphysis normal-width 1 cm medium-quality urethra_euo in anatomic position incision at rvf edge, sharp dissection, 1.5 cm 0 rectum defect, friable poor-quality rectum tissue, **complicated** tension-free longitudinal rectum closure by double layer of inverting interrupted/continuous serafit, no pvw left, check on hemostasis, skin closure



RR
preanesthesia: 130/80 mm Hg
5': 120/70
10': 110/70
postoperation: 110/60

pt 258

kano mdg
anteriolateral L trauma
fistula overlooked at first visit/catheter

vvf 4658
cath 925
rvf

b u t (kano)

female

30 yr

13.09.11

surgeon: kees waaldijk

assistant: binta musa

diagnosis: PIX (5 alive), **strange** ± 0.5 cm 0 urethrovesicovaginal fistula extremely L type **IIAa** within 5x1 cm transverse avw/pcf trauma midline/L, leaking urine for 4.5 mth which started immediately following obstructed last labor for 3 days (2 at home), in hospital bichi sb male, married 17 yr ago pre (menarche 4 mth later), still living at husband, no menstruation, drop foot R (grade 4) and L (grade 4), no rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/pubic arch 85°, ar pos R+L, **no** saddle anesthesia, anus closed, **no** flatus incontinence, aff/atl + pc_ilcm loss at L euo/f 4 cm, f/c 2 cm, i/v 12 cm midline fistula **healed** 154 cm

operation: **highly complicated** uvvf-repair

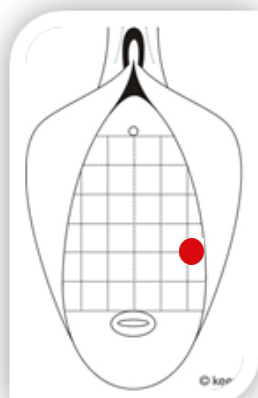
cervix mobile

duration: 25 min

healing 85% continence 90%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision thru/at fistula edge, sharp dissection, **complicated** tension-free transverse bladder/urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 3x (for proper hemostasis) everting seralon, check on hemostasis; free urine flow, euo/bw 12 cm, anterior elevation, euo/b 1.9 cm normal bladder capacity (longitudinal diameter 12-1.9 = 10 cm) acceptable position of uv-junction **against** middle/caudad third of symphysis normal-width 2 cm good-quality urethra_euo in anatomic position **still** transverse pcf defect if incontinence then for pcf repair/fixation



0.5 cm 0

RR
preanesthesia: 160/100 mm Hg
5': 140/80
10': 130/80
postoperation: 130/80

pt 259

kano mdg

vvf 4659

total extensive circumferential trauma

y u w (kano city)

female

14 yr

13.09.11

surgeon: kees waaldijk

assistant: binta musa

diagnosis: PI (0 alive), \pm 2 cm 0 urethrovesicovaginal fistula type **IIAb** with circumferential defect, **leaking urine for 78 days** which started immediately after cs mmsh bco obstructed labor for 3 days, sb female, married 1 yr ago post(menarche 3 mth earlier), not living with husband, no menstruation, drop foot R (grade 5) and L (grade 2-3), healed proximal midline 1 cm pvw (never tusa pv), no rvf, no yankan gishiri, eclampsia yes; normal ap diameter/wide pubic arch 90°, ar pos, bilateral atf/atl + pc_ilc_iscm loss + ssl_pm trauma, cervix fixed/retracted, lpl stricture, moderate stenosis euo/f 3 cm, f/c 2 cm, ab/au 1 cm, i/v 10 cm 152 cm

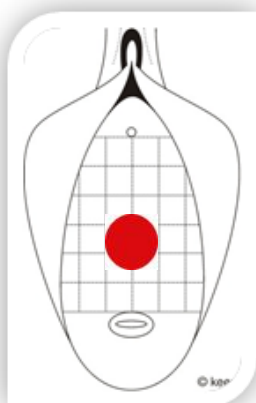
operation: 4/5 circumferential uvvf-repair + bilateral pcf refixation

duration: 50 min

healing 85% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

episiotomy L with severing of stricture, transverse incision thru/at fistula edge, sharp 4/5 circumferential dissection, tension-free 4/5 circumferential uvvf-repair by end-to-end vesicourethrostomy by single layer of inverting serafit, exactly now **heavy stool contamination spoils it**, bilateral fixation of pc fascia onto paraurethra_euo atf/symphysis by 2x serafit each side, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemotasis, skin closure; free urine flow, euo/bw 15 cm, good anterior elevation, euo/b 3.1 cm normal bladder capacity (longitudinal diameter 15-3.1 = 12 cm) good position of uv-junction **fixed against** middle third of symphysis normal-width 3 cm good-quality urethra_euo in anatomic position



2 cm 0

RR
 preanesthesia: 130/80 mm Hg
 5': 120/70
 10': 120/70
 postoperation: 120/70

pt 260

kano

mdg

vvf 060

anteriobilateral trauma

z a k d (kano)

female

43 yr

13.09.11

surgeon: dr idris suleiman abubakar

assistant: aisha shehu

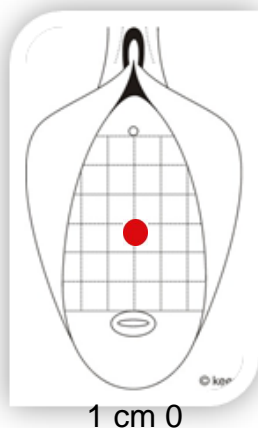
diagnosis: PII (0 alive), multiple 3 minute lungu-lungu fistulas within 1 cm avw area at R type **IIAb**, leaking urine for 15 yr which started immediately following last obstructed labor for 4 days, in hospital sb male, married 30 yr ago pre (menarche 3 mth later), still living with husband, normal menstruation, bilateral drop foot for 3 mth R (grade 5) and L (grade 5), no rvf, no yankan gishiri, eclampsia yes; normal ap diameter/pubis arch 85°, ar pos, cervix fixed. moderate vagina shortening/stenosis, operated 1x (wusasa), bilateral atf/atl + pc_iloc_iscm loss
 euo/f 2 cm, f/c 4 cm, i/v 6 cm 140 cm

operation: uvvf-repair

duration: 30 min healing 90% continence 90%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

episiotomy R, incision at fistula edge, sharp dissection, tension-free transverse bladder/urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, fixation of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 2 cm
 normal bladder capacity (longitudinal diameter 12-2 = 10 cm)
 acceptable position of uv-junction **against** middle/caudad third of symphysis
 normal-width 2 cm good-quality urethra_euo in anatomic position



RR

preanesthesia: 130/90 mm Hg
 5': 130/80
 10': 130/80
 postoperation: 130/80

pt 261

kano

mdg

vvf 061

anteriobilateral trauma

k g z g (kano city)

female

54 yr

13.09.11

surgeon: dr idris suleiman abubakar

assistant: aisha shehu

diagnosis: PXII (5 alive), \pm 3 cm 0 urethrovesicovaginal fistula type with circumferential defect type **IIAb**, leaking urine for 12 yr which started immediately following obstructed last labor for 2 days, at home sb male, married 42 yr ago pre(menarche 1 yr later), still living with husband, meno pause 6 yr ago, bilateral drop foot for 2 mth R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/pubic arch 85°, ar pos, cervix mobile, bilateral atf/atl + pc_ilc_iscm ,loss
 euo/f 2 cm, f/c 3 cm, ab/au 1 cm, i/v 7 cm 152 cm

operation: uvvf-repair

duration: 45 min

healing 90% continence 80%

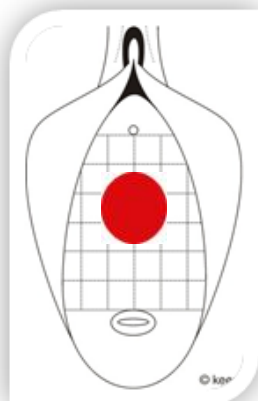
anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

episiotomy R, incision at fistula edge, sharp dissection, tension-free transverse bladder/urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, foley ch 18, transverse avw adaptation by 3x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 9 cm, good anterior elevation, euo/b 2 cm

normal bladder capacity (longitudinal diameter 9-2 = 7 cm)

acceptable position of uv-junction **against** middle/caudad third of symphysis

normal-width 2 cm good-quality urethra_euo in anatomic position



3 cm 0

RR

preanesthesia: 170/100 mm Hg
 5': 160/100
 10': 150/100
 postoperation: 150/100

pt 262

kano
anterior trauma

mdg

vvf 062

a n b-b (kano)

female

15 yr

13.09.11

surgeon: dr amir imam yola

assistant: aisha shehu

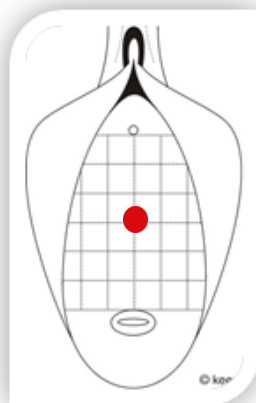
diagnosis: PI, \pm 1 cm 0 urethrovesicovaginal fistula type **IIAa** midline, leaking urine for 5 mth which started immediately following obstructed labor for 3 days, in hospital bichi sb female, married 3 yr ago pre(menarche 2 mth later), not living with husband, no menstruation, drop foot R (grade) and L (grade), no rvf, no yankan gishiri, eclampsia yes; normal ap diameter/pubis arch 85°, ar pos, cervix mobile
euo/f 3 cm, f/c 3 cm, i/v 10 cm 150 cm

operation: uvvf-repair

duration: 25 min healing 90% continence 85%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision thru/at fistula edge, sharp dissection, tension-free transverse bladder/urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, foley ch 18, transverse avw adaptation by 2x everting seralon, check hemostasis; free urine flow, euo/bw 15 cm, good anterior elevation, euo/b 2 cm normal bladder capacity (longitudinal diameter 15-2 = 13 cm)
acceptable position of uv-junction **against** middle/caudad third of symphysis
normal-width 2 cm good-quality urethra_euo in anatomic position



1 cm 0

RR
preanesthesia: 120/70 mm Hg
5': 120/70
10': 120/70
postoperation: 120/70

**long-standing post IIAb repair; visible transverse pcf gap
distal lengthening just by uniting labia with euo appearing as fistula**

u s g (kano) female 42 yr 14.09.11

surgeon: kees waaldijk

assistant: binta musa

diagnosis: PV (1 alive), post **IIAb** total urine intrinsic_stress incontinence grade III, leaking urine whilst lying/sitting/standing/walking + no spontaneous micturition for 17 yr which started immediately following obstructed 4th labor for 2 days, in hospital sb male, married 29 yr ago pre(menarche), still living with husband, normal menstruation, drop foot R (grade 5) and L (grade 4), no rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/wide pubic arch 95°, ar pos, cervix mobile; after repairs she delivered 1x, sb female at home, and had distal lengthening "urethroplasty" (zaria_abu), major bilateral atf/atl + pc_io_ilc_iscm loss (**empty** pelvis) euo/c 2 cm (after severing neourethra) "**open**" urethra_euo in anat pos euo/bw 10 cm, poor elevation, euo/b 0.6 cm, i/v 11 cm 162.0 cm

operation: paraurethra_euo fixation of pc fascia_??ff graft??

duration: 25 min healing 95% continence 75%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

euo looks like fistula, after severing neourethra euo looks "normal" gv: no leakage small epi L, transverse incision at 2 cm from euo thru repair scar, sharp dissection, it looks like ff graft has been performed (not by me), bilateral distal fixation of poor-quality proximal pc fascia/ff graft onto paraurethra_euo atf by 3x serafit each side with urethra_euo stabilization and fascia tightening, now euo/b 2.3 cm, **no** urine thru euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon, tightening of perineal body by 1x serafit, episiotomy closure, check on hemo stasis; free urine flow, euo/bw 11 cm, good anterior elevation, euo/b 3.2 cm (**urethral lization_compression**) **no** longer visible pcf gap; paravesical spaces better normal bladder capacity (longitudinal diameter 11-2.3 = 8.5 cm) good position of uv-junction **against** third of symphysis medium-quality fascia plate poor-quality pcm the **problem: long-standing** normal-width 2.5 cm medium-quality urethra_euo in anatomic position

RR

preanesthesia: 130/80 mm Hg

5': 130/80

10': 130/80

postoperation: 130/80

anteriobilateral + severe surgical trauma

h a t g (kano)

female

30 yr

14.09.11

surgeon: kees waaldijk

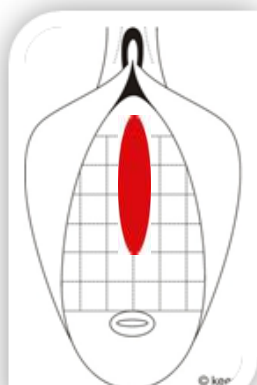
assistant: binta musa

diagnosis: PIII (1 alive), **mutilated** ± 4x1 cm urethrovesicovaginal fistula type **IIBb** with circumferential defect, leaking urine for 15 yr which started immediately following forceps delivery gwarzo bco obstructed first labor for 2 days, sb male, married 17 yr ago pre(menarche 3 mth later), still living with husband, normal menstruation, bilateral drop foot for 2 mth R (grade 5) and L (grade 5), no rvf, no yankan gishiri, eclampsia yes; normal ap dia meter/pubis arch 85°, ar pos, cervix fixed, operated 3x (m/fashi 2x + ka_mmsH 27.1.09), bilateral atf/atL + pc_ilc_iscm loss R > L
euo/f 0 cm, f/c 2 cm, i/v 0.5 cm, i/v 10 cm cervix fixed midline 150 cm

operation: L ureter catheterization/**complicated** urethra/fascia/avw "reconstruction"duration: 45 min (**step-by-step teaching**) healing 75% continence 70%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

small epi L, only L ureter identified/catheterized by metal sound, wide H incision around fistula, sharp dissection, severe fibrosis/scarring of bladder neck, sharp mobilization of (para)urethra tissue, tension-free longitudinal urethra "reconstruction" over 3 cm with repositioning of retracted uv-junction by single layer of inverting interrupted serafit, only at R fixation of "pc fascia" onto paraurethra atf by 1x serafit each side, euo/b 2.3 cm, **no** urine thru suture line/euo on rest/cough/pressure, avw reconstruction by avw advancement flap by 2-point fixation onto paraurethra atf/symphysis by everting seralon and then longitudinal closure over distal urethra as part of triple fixation of foley ch 18, check on hemostasis, episiotomy closure; free urine flow, euo/bw 10 cm, good anterior elevation, euo/b 2.3 cm **the problem: severe scarring/fibrosis of bladder neck**
normal bladder capacity (longitudinal diameter 10-2.3 = 7.5 cm)
good position uv-junction **against** middle third symphysis **no** water-tight closure
normal-width 2.5 cm **good-quality** urethra_euo in anatomic position



longitudinal 4x1 cm

RR
preanesthesia: 140/90 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

pt 265

kano

vvf 4662/4427

yankan gishiri by doctor; now 3x1 cm urethra loss up to cervix

r a y (kano)

female

18 yr

14.09.11

surgeon: kees waaldijk

assistant: binta musa

diagnosis: P0, **mutilated multiple two** ± 1 cm 0 urethrovesicovaginal fistula type **IIBa** following urethra reconstruction 27.4.10 (mmsh_ka) bco post IIBa in continence (repair 23.2.10), leaking urine for 5 yr that started immediately following operation by doctor in mmsh bco ba hanya, never married, normal menstruation, no rvf; normal ap diameter/pubis arch 85°, ar pos, vagina malformation with circular stricture, operated 2x
nb drop foot R (grade 4) with contracture up to 75/-15° dorsiflexion and L (grade 4) with contracture up to 100/+10° dorsiflexion
 EUO/F 0.5 cm, F/F 0.5 cm, F/C 0 cm, i/v 8 cm 150.0 cm

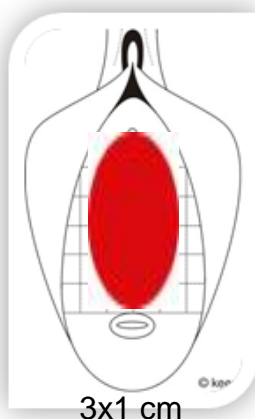
operation: urethra/avw reconstruction

duration: 30 min

healing 85% continence 85%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

bilateral stricture “severing”, wide U incision around fistula, sharp dissection, sharp mobilization of (para)urethra tissue, tension-free longitudinal urethra reconstruction over 3 cm with repositioning of retracted uv-junction by single layer of inverting interrupted serafit, euo/b 2.2 cm, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, longitudinal avw adaptation by 2x everting seralon check on he mostasis; free urine flow, euo/bw 11 cm, good anterior elevation, euo/b 2.2 cm normal bladder capacity (longitudinal diameter 11-2.2 = 9 cm)
 good position uv-junction **against** middle third symphysis
 normal-width 2 cm “fibrotic”/good-quality urethra_euo in anatomic position
 fibrosis ++ as usual in congenital vagina malformation pc fascia **not** identified



RR
 preanesthesia: 120/70 mm Hg
 5': 120/70
 10': 120/70
 postoperation: 120/70

pt 266

kano

mdg

vvf 063

anterior/iatrogenic trauma

a a niger state

female

25 yr

14.09.11

surgeon: dr amir imam yola

assistant: aisha shehu

diagnosis: PIV (1 alive), \pm 0.5 cm 0 urethrovesicocervicovaginal fistula type **IIAa**, leaking urine for 14 mth which started immediately following cs kagara bco obstructed last labor for 1 day, sb male, married 12 yr ago post(men arche 2 mth earlier), still living with husband, normal menstruation, drop foot R (grade 5) and L (grade 4), no rvf, no yankan gishiri, no eclampsia; normal ap diameter/pubis arch 85°, ar pos, cervix fixed, moderate vagina stenosis/shortening, operated 1x (mms_h_am)

164 cm

operation: uvcvf-repair

duration: 40 min

healing 80% continence 70%

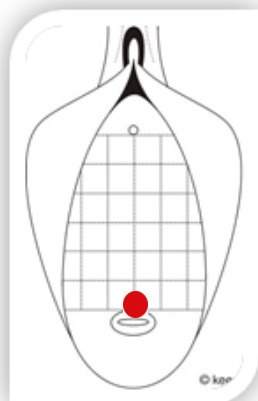
anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision thru/at fistula edge, sharp dissection, tension-free transverse bladder/urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, foley ch 18, transverse avw/cervix adaptation by 3x everting seralon, check on hemostasis; free urine flow, euo/bw 11 cm, good anterior elevation, euo/b 2 cm

normal bladder capacity (longitudinal diameter 11-2 = 9 cm)

acceptable position of uv-junction **against** middle/caudad third of symphysis

normal-width 2 cm good-quality urethra_euo in anatomic position



0.5 cm 0

RR

preanesthesia: 130/80 mm Hg
 5': 130/80
 10': 130/80
 postoperation: 130/80

pt 267

kano

mdg

vvf 064

post Ab repair post delivery

s g d (kano)

female

22 yr

14.09.11

surgeon: dr idris suleiman ababakar

assistant: mariya yusuf

diagnosis: PIII (0 alive), total post **IIAb** postdelivery urine intrinsic incontinence, leaking urine whilst lying/sitting standing/walking + spontaneous miction for 2 yr which started immediately following obstructed last labor for 2 days, at home sb male, married 9 yr ago pre(menarche 5 mth later), still living with husband, normal menstruation, no h/o drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no eclampsia; normal ap diame ter/pubis arch 85°, ar pos, cervix mobile
euo/bw 12 cm, moderate elevation, euo/b 2 cm, i/v 12 cm 158 cm

operation: bladder neck elevation

duration: 30 min

healing 90% continence 70%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision thru repair scar, sharp dissection, bilateral fixation of pc fascia onto paraurethra atf by 3x serafit each side, **no** urine thru suture line/euo on rest/cough/pressure, foley ch 18, transverse avw adaptation by 3x everting seralon, check on hemostasis; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 2.6 cm normal bladder capacity (longitudinal diameter 12-2.6 = 9.5 cm)
good position of uv-junction **against** middle third of symphysis
normal-width 2.5 cm good-quality urethra_euo in anatomic position

RR

preanesthesia: 130/80 mm Hg

5': 130/80

10': 120/80

postoperation: 120/80

pt 268

kano
anterior trauma

mdg

vvf 065

u s g g-m (kano)

female

33 yr

14.09.11

surgeon: dr amir imam yola

assistant: aisha shehu

diagnosis: PIX (5 alive), \pm 5 cm 0 urethrovesicovaginal fistula type **IIAa** with bladder base prolapse, **leaking urine for 71 days** which started immediately following obstructed last labor for 3 days, in hospital minjibir sb male, married 19 yr ago post(menarche 10 mth earlier), still living with husband, no menstruation, drop foot R (grade 5) and L (grade 2), no rvf, no yankan gishiri, no eclampsia; ap diameter/pubic arch 85°, ar pos, cervix mobile euo/f 2.5 cm, f/c 0 cm, i/v 6 cm 157 cm

operation: uvvf-repair

duration: 60 min

healing 75% continence 80%

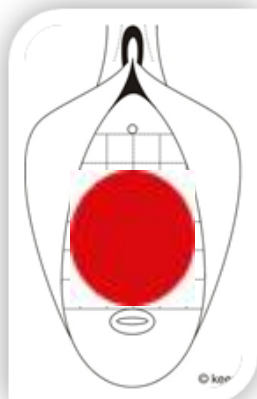
anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

catheterization L ureter, incision at fistula edge, sharp dissection, tension-free transverse bladder/urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 13 cm, good anterior elevation, euo/b 2 cm

normal bladder capacity (longitudinal diameter 13-2 = 11 cm)

acceptable position of uv-junction **against** middle/caudad third of symphysis

normal-width 2 cm good-quality urethra_euo in anatomic position



5 cm 0

	RR
preanesthesia:	140/90 mm Hg
5':	140/80
10':	130/80
postoperation:	130/80

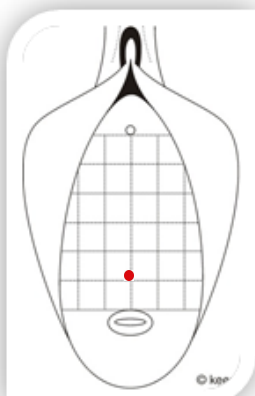
s b a-g (kano city)

female 16 yr

15.09.11

diagnosis: PI (0 alive), **traumatized** euo, ?minute < 0.1 cm 0 urethrovesicovaginal fistula I type? within totally inflamed avw, **leaking urine for 25 days** that started immediately following obstructed labor of 3 days, in hospital ringim sb female, married 2 yr ago post(menarche 1 yr earlier), not living with husband, no menstruation, drop foot R (grade 2-3) and L (grade 4), no rvf, no yankan gishiri, eclampsia yes; normal ap diameter/pubis arch 85°, ar pos **objective** intrinsic_stress incontinence
euo/"f" 5 cm, "f"/c 1 cm 161 cm

15.09.11 foley ch 18; free urine flow, euo/bw 12 cm, moderate anterior elevation, euo/b 1 cm
normal bladder capacity (longitudinal diameter 12-1 = 11 cm)
poor position of uv-junction **against** caudad third of symphysis
traumatized 1 cm poor-quality urethra_euo in "anatomic" position



minute < 0.1 cm 0

pt 270

kano mdg

vvf 4663

**that specific zandloper urethra_euo trauma
anterior trauma: median pc fascia defect**

n d k-m (kano)

female

15 yr

15.09.11

surgeon: kees waaldijk

assistant: binta musa

diagnosis: PI (0 allive), total urine intrinsic_stress incontinence grade III, leaking urine whilst lying/sitting/standing/walking + spontaneous miction for 4 mth which started immediately following obstructed labor for 3 days, in hospital danbatta sb male, married 1.5 yr ago post(menarche 5 mth earlier), still living with husband, normal menstruation, drop foot R (grade 4-5) and L (grade 3-4), no rvf, no yankan gishiri, eclampsia yes; normal ap diameter/wide pubic arch 95°, ar pos, cervix mobile

wide open zanloper urethra_euo posteriorly pulled inside

euo/bw 12 cm, poor elevation, euo/b 0.2 cm, i/v 11 cm 160 cm

operation: urethralization by longitudinal fascia repair + euo rhaphy

duration: 25 min (**step-by-step teaching**) healing 95% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse curved incision at cm from euo parallel/within ruga folds, sharp dissection, 5x2 cm median longitudinal fascia defect, longitudinal repair/rhaphy of pc fascia at 1-5 cm from euo by serafit, **intact** pcf fixation onto paraurethra atf, since euo still wide open (though no longer incontinence) closed euo-rhaphy by 1x serafit, now euo/b 2.2 cm, **no** urine thru euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw_pcf/symphysis_avw adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 12 cm, good elastic anterior elevation, euo/b 2.2 cm (**urethralization**) normal bladder capacity (longitudinal diameter 12-2.2 = 10 cm) good position uv-junction **against** middle third symphysis good fascia plate good-quality pcm normal-width 2 cm good-quality urethra_euo in anatomic position

RR

preanesthesia: 130/70 mm Hg

5': 120/70

10': 120/70

postoperation: 110/70

pt 271

kano mdg

vvf 4666

total circumferential trauma

r s r-b (kano city)

female

17 yr

15.09.11

surgeon: kees waaldijk

assistant: binta musa

diagnosis: PI (0 alive), **mutilated severely scarred** ± 0.5 cm 0 urethrovesicovaginal fistula slightly at L with circumferential defect type **IIAb**, leaking urine for 1 yr which started immediately following cs bebeji bco obstructed labor for 3 days, sb male, married 4 yr ago pre(menarche 3 mth later), still living with husband, normal menstruation, drop foot R (grade 4-5) and L (grade 5), no rvf, no eclampsia; normal ap diameter/pubis arch 85°, ar pos, bilateral atf/atl + pc_iloc_iscm loss, cervix fixed, moderate_severe stenosis/short ening, operated 10.2.11 (mmsh_ka)

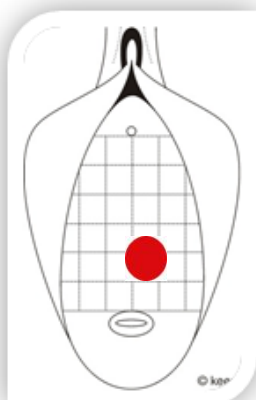
yankan gishiri during labor by ungozoma/sitting/razor/cutting (-tomy)
euo/f 1.5 cm, f/c 0.5 cm, ab/au xx cm, i/v 5 cm 147 cm

operation: uvvf-repair + "pcf" refixation at L

duration: 25 min (**step-by-step teaching**) healing 85% continence 85%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

re-episiotomy, large transverse incision thru fistula/repair scar, sharp dissection, excision of scar tissue +, tension-free transverse bladder/urethra closure by single layer of inverting serafit with refixation of scarred pcf at L onto öparaurethra atf by 2x serafit, intact fixation at R, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw/avw_cervix adaptation by 2x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 11 cm, good anterior elevation and euo/b 1.2 cm (circ defect) **the problem: mutilation/short urethra/scarring**
normal bladder capacity (longitudinal diameter 11-1.2 = 10 cm) **still good feeling**
poor position of uv-junction **fixed against** caudad third of symphysis
"normal-width" 1 cm poor-quality urethra_euo in anatomic position



RR
preanesthesia: mm Hg
5':
10':
postoperation:

pt 272
pt
pt

kano mdg
third obstetric fistula

vvf 4665
vvf 2194/2879
vvf 4139

k i g (kano) female 29 yr 15.09.11

surgeon: kees waaldijk

assistant: binta musa

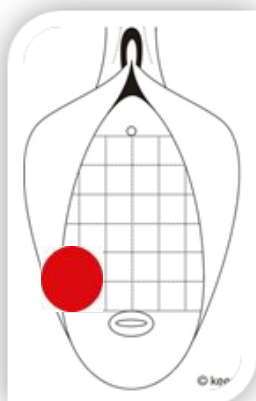
diagnosis: PIII/V (0 alive), **mutilated extensive** \pm 1.5 cm 0 urethrovesicovaginal fistula with circumferential defect type **IIAb** at extreme R lungu, leaking urine for 1 yr that started immediately following obstructed last labor for 2 days, at home live male who died 2 days later, married 16 yr ago pre(menarche 2 mth later), still living with husband, normal menstruation, no drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no eclampsia; normal ap diameter/pubic arch 85°, ar pos, bilateral atf/atl + pc_ilc_iscm loss, cervix fixed towards i spine R
euo/f 2.5 cm, f/c 0 cm, ab/au xx cm, i/v 10 cm 148 cm

operation: uvvf-“repair”

duration: 40 min healing 85% continence 60%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision thru/at fistula edge, sharp dissection thru cervix, excision of scar tissue +, tension-free transverse bladder_cervix/symphysis “closure” with partial repositioning of cervix by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 1.4 cm since no urine thru euo chance of continence may be higher **85%** normal bladder capacity (longitudinal diameter 12-1.4 = 10.5 cm) poor position of uv-junction **fixed against** caudad third of symphysis normal-width 1.5 cm poor-quality urethra_euo in anatomic position



RR
preanesthesia: mm Hg
5':
10':
postoperation:

pt 273

kano
anterior trauma

mdg

vvf 066

z s u b (kano city)

female

16 yr

15.09.11

surgeon: dr idris suleiman abubakar

assistant: aisha shehu

diagnosis: PI (0 alive), \pm 2.5 cm 0 urethrovesicovaginal fistula type **IIAa**, leaking urine for 2 yr which started immediately following obstructed labor for 3 days, in hospital (1 day) gaya sb female, married 3 yr ago pre(menarche 3 mth later), still living with husband, normal menstruation, drop foot R (grade) and L (grade), no rvf, no yankan gishiri, eclampsia yes; normal ap diameter/pubic arch 85°, ar pos, cervix mobile, operated 1x (laure_ka) euo/f 2 cm, f/c 2 cm, i/v 10 cm 149 cm

operation: uvvf-repair

duration: 30 min

healing 85% continence 85%

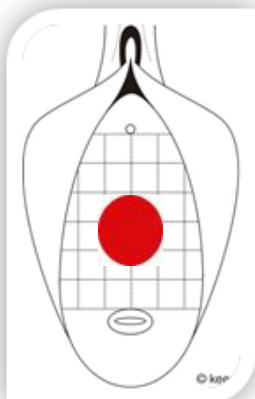
anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

episiotomy R, incision at fistula edge, sharp dissection, tension-free transverse bladder/urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, foley ch 18, transverse avw adaptation by 3x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 16 cm, good anterior elevation, euo/b 1.9 cm

normal bladder capacity (longitudinal diameter 13-1.9 = 11 cm)

acceptable position of uv-junction **against** middle/caudad third of symphysis

normal-width 2 cm good-quality urethra_euo in anatomic position



	RR
preanesthesia:	130/80 mm Hg
5':	120/80
10':	120/70
postoperation:	110/70

pt 274

kano
anterior trauma

mdg

vvf 067

s y m g (kano)

female

15 yr

15.09.11

surgeon: dr amir imam yola

assistant: mariya

diagnosis: PI (alive), \pm 0.5 cm 0 urethrovesicovaginal fistula type **IIAa** at midline, **leaking urine for 44 days** which started immediately following obstructed labor for 3 days, in hospital (1 day) gwarzo live female, married 2 yr ago pre(menarche 1 mth later), still living with husband, no menstruation, drop foot R (grade 3) and L (grade 4), no rvf, no yankan gishiri, no eclampsia; normal ap diameter/pubis arch 85°, ar pos, cervix mobile
euo/f 4 cm, f/c 2 cm, i/v 12 cm 147 cm

operation: uvvf-repair

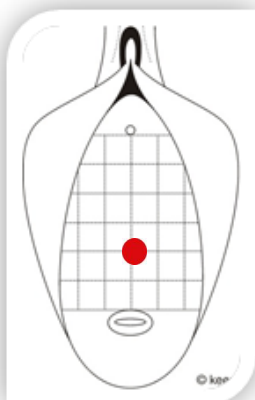
duration: min

healing

continence

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision thru/at fistula edge, sharp dissection, tension-free transverse bladder/urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, foley ch 18, transverse avw adaptation by 2x everting seralon, check hemostasis; free urine flow, euo/bw 14 cm, good anterior elevation, euo/b 2.5 cm normal bladder capacity (longitudinal diameter 14-2.5 = 11.5 cm)
good position of uv-junction **against** middle third of symphysis
normal-width 2.5 cm good-quality urethra_euo in anatomic position



RR
preanesthesia: 120/70 mm Hg
5': 120/70
10': 120/70
postoperation: 120/70

pt 275

kano
anterior trauma

mdg

vvf 068

r a u_k k (kano)

female

15 yr

15.09.11

surgeon: dr idris suleiman abubakar

assistant: naomi

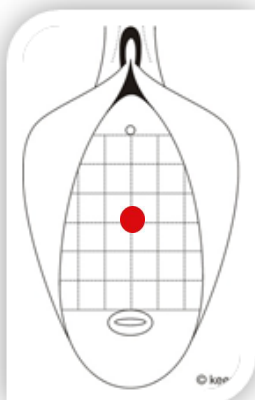
diagnosis: PI (0 alive), \pm 4 cm 0 urethrovesicovaginal fistula type **IIAa** with bladder base prolapse, **leaking urine for 37 days** which started immediately following obstructed labor for 5 days, at home sb female, married 2 yr ago pre(menarche 1 mth later), not living with husband, no menstruation, drop foot R (grade 2) and L (grade 3), no rvf, no yankan gishiri, no eclampsia; normal ap diameter/pubis arch 85°, ar pos, cervix mobile
euo/f 2 cm, f/c 1 cm, i/v 11 cm 152 cm

operation: bilateral ureter catheterization + uvvf-repair

duration: 45 min healing 85% continence 85%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

episiotomy R, bilateral ureter catheterization for 20 cm, incision at fistula edge, sharp dissection, tension-free transverse bladder/urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, foley ch 18, transverse avw adaptation by 4x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 9 cm, good anterior elevation, euo/b 1.7 cm
normal bladder capacity (longitudinal diameter 9-1.7 = 7.5 cm)
poor position of uv-junction **against** caudad third of symphysis
normal-width 1.5 cm good-quality urethra_euo in anatomic position



RR
preanesthesia: 130/80 mm Hg
5': 120/80
10': 120/70
postoperation: 110/70

pt 276

kano
iatrogenic trauma

vvf 4666

h i d r (kano)

female

32 yr

16.09.11

surgeon: kees waaldijk

assistant: binta musa

diagnosis: PII (0 alive), **mutilated multiple** ± 0.5 cm 0 urethrovesicovaginal fistulas R/L "lungu" type **IIAa**, leaking urine for 11 yr which started immediately following tah-cs mmsh bco obstructed last labor for 1 day, sb male, married 20 yr ago pre(menarche 1 yr later), no living at husband, not menstruation since, no h/o drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no eclampsia; normal ap diameter/pubis arch 85°, ar pos, vault fixed, moderate-severe shortening, operated 4x including 5.4.11 (mmsh) euo/f 3.5 cm, f/v 0 cm, i/v 6 cm **traumatized euo** 154 cm

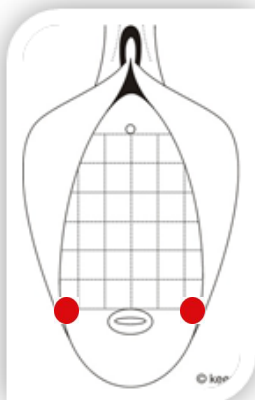
operation: tah-cs uvvf-repair

duration: 40 min

healing 85% continence 85%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

re-episiotomy, transverse incision thru fistulas_vault, sharp dissection, tension-free transverse poor-quality scar tissue/pubis bones_urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw/pvw adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 2.8 cm normal bladder capacity (longitudinal diameter 12-2.8 = 9 cm) good position of uv-junction **against** middle third of symphysis traumatized "normal-width" 3 cm good-quality urethra_euo in anatomic position



RR
preanesthesia: mm Hg
5':
10':
postoperation:

pt 277

kano

mdg

vvf 069

anterior + iatrogenic trauma

b m h-b (kano)

female

33 yr

16.09.11

surgeon: dr amir imam yola/dr idris suleiman abubakar

assistant: naomi ikupolati

diagnosis: PIII (1 alive), \pm 1 cm 0 intracervical cs-vesicocervicovaginal fistula type I, **leaking urine for 38 days** which started immediately following cs priv clin sharada bco obstructed labor for 2 days, sb male, married 20 yr ago post (menarche 4 mth earlier), still living with husband, no menstruation, drop foot R (grade 4) and L (grade 1), no rvf, no yankan gishiri, no eclampsia; normal ap diameter/pubis arch 85°, ar pos, cervix midline shortening euo/f 5 cm, f/c 0 cm, i/v 6 cm obesity + 152 cm

operation: **highly complicated** cs-vcvf-repair

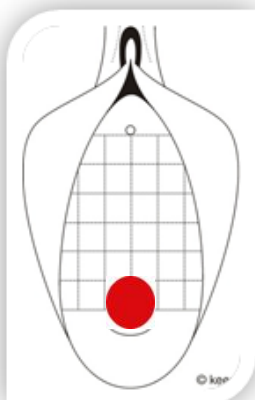
duration: 80 min

healing 70% continence 70%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

severe scoliosis

transverse incision thru/at fistula edge, sharp dissection, **complicated** tension-free transverse bladder closure by single layer inverting serafit, **no** urine thru suture line/euo on rest/cough, foley ch 18, transverse avw/cervix adaptation by 2x everting seralon, hemostasis check; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 2.9 cm normal bladder capacity (longitudinal diameter 12-2.9 = 9 cm) good position of uv-junction **against** middle third of symphysis normal-width 3 cm good-quality urethra_euo in anatomic position



RR
preanesthesia: 130/80 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

zaria
anterior trauma

cath 80

r b s l (zaria city) female 19 yr 07.08.11

diagnosis: PI (alive), overflow incontinence due to atonic bladder, **leaking urine for 3 days** which started immediately following obstructed labor for 2 days, in hospital live male, married 2 yr ago post(menarche 4 yr earlier), still living with husband, no menstruation, no drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no eclampsia; normal ap diameter/pubic arch 85°, ar pos avw bulging but no further avw trauma obesity ++

07.08.11 masked suprapubic mass, avw bulging into vagina, bladder overdistended (euo/bw 22 cm), moderate anterior elevation after draining > 1.500 ml of urine, euo/b 1 cm foley ch 18; free urine flow **increased** bladder capacity (longitudinal diameter 22-1 = 21, **atonic bladder**)
poor position of uv-junction **against** caudad third of symphysis
normal-width 1 cm good-quality urethra_euo in anatomic position

10.09.11 not leaking cath removed

17.09.11 not leaking at all, no incontinence, normal miction
Insp/ healed, good elevation, no stress incontinence

anterior + iatrogenic trauma

m t g-i (kaduna)

female

34 yr

17.09.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PX (8 alive), \pm 1 cm 0 sth-cs vesicocervicouterovaginal fistula type I, leaking urine for 6 mth which started immediately following sth-cs bco last obstructed labor for 2 days, sb female, married 21 yr ago post(menarche 5 mth earlier), **not** living with husband, no menstruation, no h/o drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/pubis arch 85°, ar pos, cervix fixed midline euo/f 6 cm, f/c 0 cm, i/v 12 cm cm

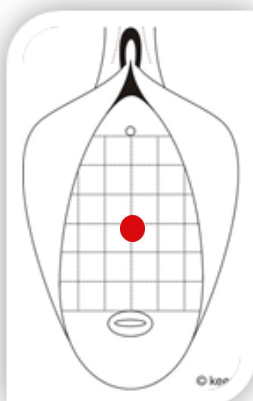
operation: uvvf-repair

duration: 40 min

healing 85% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

small episiotomy L, transverse incision thru/at fistula edge-cervix, sharp dissection, tension-free transverse bladder/post cervix closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw/post cervix adaptation by 2x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 1.9 cm normal bladder capacity (longitudinal diameter 12-1.9 = 10 cm) acceptable position of uv-junction **against** middle/caudad third of symphysis normal-width 2 cm good-quality urethra_euo in anatomic position **seems sth + total loss ant uterus wall/post uterus wall now part of post bladder**



RR
 preanesthesia: 170/100 mm Hg
 5': 160/90
 10': 140/80
 postoperation: 130/80

pt 281

zaria

vvf 521/500/472

extensive total circumferential trauma

rvf

f s g (zaria city)

female

15 yr

17.09.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PI (0 alive), total post **IIAb** intrinsic_stress incontinence grade III, leaking urine whilst lying/sitting/standing/walking + **no** spontaneous miction with ?residual minute lungu fistula L? following multiple repairs 18.2 to 11.5.11 not living with husband, no menstruation, drop foot R (grade 5) and L (grade 3); ?AP diameter?/normal pubic arch 85°, AR pos, **major** bilateral atf/atf + pc_io_ilc_iscm loss (**bare bones**) and bilateral ssl_pm trauma, cervix fixed midline, moderate vagina stenosis/shortening, **no** longerh lpl stricture healed proximal 1 cm 0 pvw trauma atonic bladder component euo/f 16 cm, good elevation, euo/b 1.7 2 cm, i/v 8 cm euo/f 2.5 cm

operation: lungu uvvf-“repair”

duration: 40 min (**step-by-step teaching**) healing 80% continence 75%

anesthesia: spinal L3/L4 with 4 ml bupivacaine 0.5%

questionable leakage at L by gv

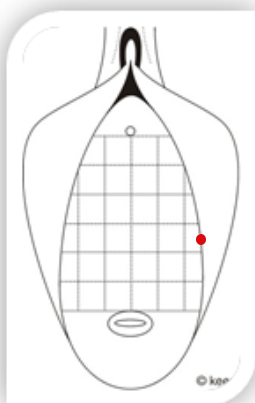
re-episiotomy L, transverse curved avw incision at L thru “fistula”, sharp dissection, since everything fixed transverse bladder/avw fixation onto symphysis by 2x seralon, **no** urine thru suture line but still thru euo + on cough/pressure, foley ch 18, avw adapted, check on hemostasis, episiotomy closure; free urine flow, euo/bw 16 cm, good anterior elevation, euo/b 1.7 cm (**circ loss**) poor-quality bladder/urethra tissue

increased bladder capacity (longitudinal diameter 16-1.6 = 14.5 cm)

poor position of uv-junction **fixed against** caudad third of symphysis

normal-width 1.5 cm poor-quality urethra_euo in anatomic position

the problem: everything fixed + poor-quality tissue



RR

preanesthesia: 130/80 mm Hg

5': 130/80

10': 120/70

postoperation: 120/70

f m k (zaria city)

female

31 yr

17.09.11

surgeon: kees waaldijk

assistant: kabir lawal

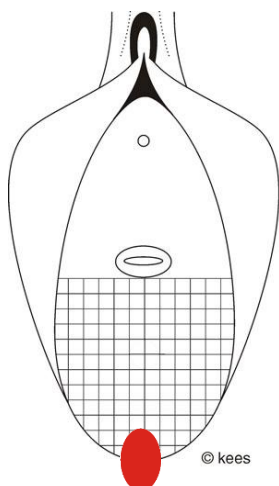
diagnosis: PX (9 alive), sphincter ani rupture with 2 cm longitudinal anorectum trauma, stool/flatus incontinence for 14 mth which started immediately after last labor for 1 day, at home live female, married 20 yr ago post(menarche 2 yr later), still living with husband, normal menstruation, no drop foot R (grade 5) and L (grade 5), no vvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/wide pubic arch 90°, ar pos **no** (s/o) operation a/f 0 cm, i/v 12 cm never leaking urine obesity +++

operation: anorectum closure and sphincter ani_perineal body reconstruction

duration: 20 min (**step-by-step teaching**) healing 95% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

incision at pwv edge with freshening of sphincter ani ends, minimal sharp dissection, longitudinal anorectum closure with adaptation_rhaphy of internal sphincter over 2.5 cm up to anocutaneous junction (with repositioning of anterior anus) by double layer of inverting interrupted/continuous serafit, inner ring of external sphincter adapted, end-to-end external sphincter ani reconstruction by 2x serafit, perineal body repair with (in) direct re-union of transversus perinei muscles and (in)direct posterior re-union of bulbo cavernosus muscles by 2x serafit, perineum well adapted with a bit **tight** anus in anatomic position, check on hemostasis **the problem: obesity +++**
foley ch 18; free urine flow, euo/bw 16 cm, moderate elevation, euo/b 2 cm



longitudinal 2 cm trauma

RR
preanesthesia: 130/80 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

k m p (kaduna)

female

23 yr

17.09.11

surgeon: kees waaldijk

assistant: kabir lawal

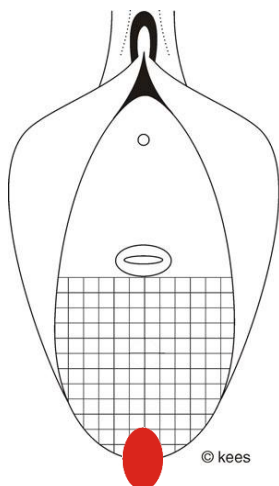
diagnosis: PI (alive), sphincter ani rupture with 2 cm longitudinal anorectum trauma, **stool flatus incontinence for 12 days** which started immediately following labor for 1 day, at home live female, married 22 mth ago post (menarche 8 yr earlier), not living with husband, no menstruation, drop foot R (grade 4) and L (grade 4), no vvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/pubis arch, ar pos, suturing 1x at home a/f 0 cm, i/v 12 cm never leaking urine cm

operation: anorectum closure and sphincter ani_perineal body reconstruction

duration: 20 min (**step-by-step teaching**) healing 95% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

removal of sutures, incision at pw edge with freshening of sphincter ani ends, minimal sharp dissection, longitudinal anorectum closure with adaptation_rhaphy of internal sphincter over 2.5 cm up to anocutaneous junction (with repositioning of anterior anus) by double layer of inverting interrupted/continuous serafit, inner ring of external sphincter adapted, end-to-end external sphincter ani reconstruction by 2x serafit, perineal body repair with (in)direct re-union of transversus perinei muscles and (in)direct posterior re-union of bulbocavernosus muscles by 2x serafit, perineum well adapted with anus in anatomic position, check on hemostasis **inflammation ++**
foley ch 18; free urine flow, euo/bw 12 cm, good elevation, euo/b 2 cm



longitudinal 2 cm trauma

RR
preanesthesia: 120/70 mm Hg
5': 110/70
10': 110/70
postoperation: 110/70

pt 284
pt 285

kano
anterior/posterior trauma

vvf 4667
rvf 769

u b a (bauchi)

female

34 yr

19.09.11

surgeon: kees waaldijk

assistant: binta musa

diagnosis: PVIII (5 alive), \pm 1 cm 0 urethrovesicovaginal fistula type **IIAa** at distal tip of 2 cm proximal avw/cervix trauma, 0.3 cm rectovaginal fistula type **la** midline, leaking urine/passing stools pv for 1 yr that started immediately following cs bco obstructed last labor for 3 days, in hospital (2 days) sb male, married 20 yr ago post(menarche 1 yr earlier), still living with husband, normal menstruation, drop foot R (grade 4) and L (grade 4-5), no yankan gishiri, no eclampsia; normal ap diameter/pubis arch 85°, ar pos, cervix fixed midline/not moving operated 03.02.11 (laure) euo/f 2 cm, f/c 1 cm, a/f 10 cm, f/c 0 cm, i/v 10 cm 152 cm

operation: uvvf-repair + **ps-like** rvf-repair

obesity +++

duration: 50 min

healing **both** 85% continence 90%

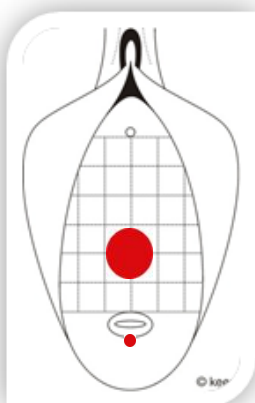
anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

re-episiotomy L, transverse incision thru/at fistula edge, sharp dissection, **under some tension** transverse bladder/urethra closure with bilateral fixation of pc fascia onto paraurethra atf by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw/avw_cervix adaptation by 2x everting seralon,; free urine flow, euo/bw 9 cm, good anterior elevation, euo/b 2.2 cm moderate-normal bladder capacity (longitudinal diameter 9-2.2 = 7 cm)

good position of uv-junction **against** middle third of symphysis

normal-width 2 cm medium-quality urethra_euo in anatomic position

RE/ no rectum stricture, freshening of rvf edge, without any dissection transverse pwv/posterior cervix adaptation by 2x everting seralon, check on hemostasis, skin closure the **problem: poor-quality tissue and everything fixed**



RR
preanesthesia: 130/80 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

pt 285
pt 284

kano
anterior/posterior trauma

rvf 769
vfv 4667

u b a (bauchi)

female

34 yr

19.09.11

surgeon: kees waaldijk

assistant: binta musa

diagnosis: PVIII (5 alive), \pm 1 cm 0 urethrovesicovaginal fistula type **IIAa** at distal tip of 2 cm proximal avw/cervix trauma, 0.3 cm rectovaginal fistula type **la** midline, leaking urine/passing stools pv for 1 yr that started immediately following cs bco obstructed last labor for 3 days, in hospital (2 days) sb male, married 20 yr ago post(menarche 1 yr earlier), still living with husband, normal menstruation, drop foot R (grade 4) and L (grade 4-5), no yankan gishiri, no eclampsia; normal ap diameter/pubis arch 85°, ar pos, cervix fixed midline/not moving operated 03.02.11 (laure) euo/f 2 cm, f/c 1 cm, a/f 10 cm, f/c 0 cm, i/v 10 cm 152 cm

operation: uvvf-repair + **ps-like** rvf-repair

obesity +++

duration: 50 min

healing **both** 85% continence 90%

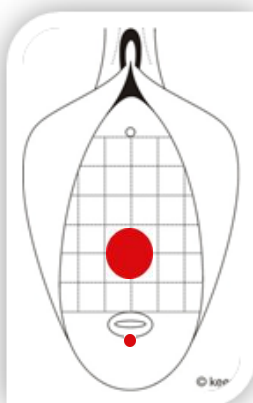
anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

re-episiotomy L, transverse incision thru/at fistula edge, sharp dissection, **under some tension** transverse bladder/urethra closure with bilateral fixation of pc fascia onto paraurethra atf by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw/avw_cervix adaptation by 2x everting seralon,; free urine flow, euo/bw 9 cm, good anterior elevation, euo/b 2.2 cm moderate-normal bladder capacity (longitudinal diameter 9-2.2 = 7 cm)

good position of uv-junction **against** middle third of symphysis

normal-width 2 cm medium-quality urethra_euo in anatomic position

RE/ no rectum stricture, freshening of rvf edge, without any dissection transverse pwv/posterior cervix adaptation by 2x everting seralon, check on hemostasis, skin closure the **problem: poor-quality tissue and everything fixed**



RR
preanesthesia: 130/80 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

pt 286

kano mdg
anteriobilateral trauma

vvf 4668

h i s d g (kano)

female

45 yr

19.09.11

surgeon: kees waaldijk

assistant: binta musa

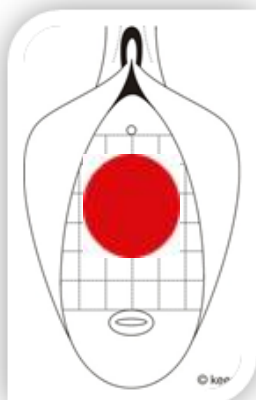
diagnosis: PX (0 alive), \pm 4 cm 0 urethrovesicovaginal fistula with circumferential defect type **IIAb/Bb**, leaking urine for 30 yr which started immediately following obstructed first labor for 2 days, in hospital mmsh sb female, married 33 yr ago pre(menarche 1 yr later), still living with husband, normal menstruation, drop foot for 2 mth R (grade 5) and L (grade 5), no rvf, no yankan gishiri, eclampsia yes; normal ap diameter/pubis arch 85°, ar pos, bilateral atf/atl + pc_iloc_iscm loss, cervix mobile, **never** operation
euo/f 1 cm, f/c 2.5 cm, ab/au 2 cm, i/v 12 cm 159 cm

operation: circumferential uvvf-repair + bilateral pcf refixation

duration: 40 min (**step-by-step teaching**) healing 90% continence 85%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision thru/at fistula edge, sharp circumferential dissection, advancement/caudad fixation of anterior bladder onto symphysis/urethra, tension-free circumferential uvvf-repair by end-to-end vesicourethrostomy by single layer of inverting serafit, bilateral fixation of pc fascia onto paraurethra_euo atf/symphysis by 2x serafit each side, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 1.2 cm (**circ loss**)
normal bladder capacity (longitudinal diameter 12-1.2 = 11 cm)
poor position of uv-junction **fixed against** caudad third of symphysis
normal-width 1 cm **good-quality** urethra_euo in anatomic position



RR
preanesthesia: 160/90 mm Hg
5': 150/90
10': 140/80
postoperation: 130/80

pt 287
pt

kano mdg
third leakage; now second obstetric

vvf 4669
vfv 2621/.3716

r a b (kano)

female

25 yr

19.09.11

surgeon: kees<waaldijk

assistant: binta musa

diagnosis: PIII (2 alive), total post **IIBa** post delivery intrinsic_stress incontinence grade III, leaking whilst lying/sitting/standing/walking + **no** spontaneous miction for 11 mth which started immediately following cs mmsh bco last labor for 1 day, live male,, married 12 yr ago pre (menarche 3 mth later), still living with husband, normal menstruation, no h/o drop foot (grade 5) and L (grade 5), no h/o eclampsia; normal ap diameter/wide pubic arch 90°, ar pos, cervix mobile but no prolapse anymore, cystocele ++ **yankan gishiri 11 yr ago: lying/she_wanzami/aska/tissue removed (-ectomy)**
euo/bw 12 cm, poor elevation, euo/b 1.1 cm, i/v 12 cm 166.0 cm

operation: urethralization and pc fascia fixation euo/c 8 cm

duration: 25 min (**step-by-step-teaching**) healing 95% continence 85%

anesthesia: spinal L4/L5 with 4 ml bupivacaine 0.5%

transverse curved incision at 2 cm from neo-euo, sharp dissection, 6x2 median defect from cervix up to 2 cm to euo, longitudinal fascia repair at 2-6 cm by serafit, bilateral fixation of pc fascia onto para-euo atf by 1x serafit each side, euo/b now 2.2 cm, **no** urine thru euo on rest/cough/pressure, foley ch 18, transverse avw adaptation by 2x everting seralon/1x serafit, check on hemostasis; free urine flow, euo/bw 12 cm, good elastic elevation, euo/b 2.2 cm

normal bladder capacity (longitudinal diameter 12-2.2 = 10 cm)

good position of UV-junction **against** middle third of symphysis

good fascia plate good-quality pcm

normal-width 2 cm medium to good_quality urethra_euo in anatomic position

the **problem: multiple repairs each with their surgical trauma** **it went fine**

RR

preanesthesia: 150/100 mm Hg

5": 160/90

10": 130/80

postoperation: 130/80

pt 288

kano
total circumferential traum

vvf 070
rvf

s j z g (kano city)

female

32 yr

19.09.11

surgeon: dr amir imam yola

assistant: naomi

diagnosis: PVIII (3 alive), \pm 2 cm 0 urethrovesicovaginal fistula type **IIAb** with circumferential defect, **leaking urine for 36 days** which started immediately following cs bco obstructed last labor for 4 days, in hosp (2 days) rano sb male, married 20 yr ago pre(menarche 1 yr later), still living with husband, no menstruation, drop foot R (grade 3) and L (grade 4), no rvf (but **flatus pv**), no yankan gishiri, no eclampsia; normal ap diameter/pubic arch 85°, ar pos, cervix fixed midline, moderate vagina stenosis/shortening
euo/f 3 cm, f/c 2 cm, i/v 8 cm 159 cm

operation: uvvf-repair

duration: 40 min

healing 90% continence 90%

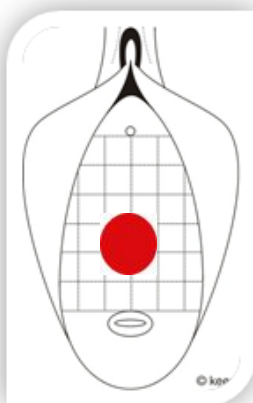
anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

episiotomy L, incision at fistula edge, sharp dissection, tension-free transverse bladder/urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, foley ch 18, transverse avw adaptation by 3x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 14 cm, good anterior elevation, euo/b 2 cm

normal bladder capacity (longitudinal diameter 14-2 = 12 cm)

acceptable position of uv-junction **against** middle/caudad third of symphysis

normal-width 2 cm good-quality urethra_euo in anatomic position



RR
preanesthesia: 130/90 mm Hg
5': 130/90
10': 130/80
postoperation: 130/80

pt 289

kano
iatrogenic trauma

mdg vvf 071

u z d (kano)

female

40 yr

19.09.11

surgeon: dr amir imam yola

assistant: aisha shehu

diagnosis: PX (8 alive), ureter fistula L, leaking urine + normal miction for 6 mth which started immediately following cs priv clin bco obstructed last labor for < 1 day, sb female, married 25 yr ago post(menarche 2 yr earlier), still living with husband, normal menstruation, no drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no eclampsia; normal ap diameter/ pubic arch 85°, ar pos, cervix fixed towards i spine L obesity ++
euo/f 10 cm, f/c 0 cm, i/v 12 cm 152 cm

operation: assessment

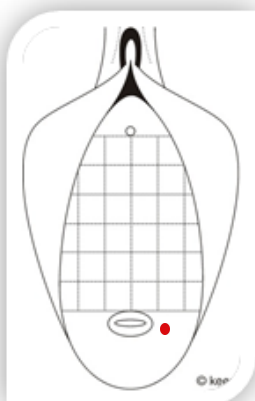
duration: 10 min

healing

continence

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

dye examination over 5 min: **no** leakage but **clear** urine from L since ureter **cannot** be catheterized for abdominal implantation by urologist



RR
preanesthesia: 140/80 mm Hg
5': 140/80
10': 130/80
postoperation: 130/80

pt 290

kano

mdg

vvf 072

total circumferential trauma; "inoperable" type IIAb fistula + rvf

I a k b (kano)

female

14 yr

19.09.11

surgeon: dr idris suleiman abubakar/kees waaldijk

assistant: naomi

diagnosis: PI, **"inoperable"** ± 4 cm 0 urethrovesicovaginal fistula type **IIAb** with circumferential defect, **inflamed scarred** ± 2x1 cm transverse rectovaginal fistula type **Ib** at L, leaking urine/passing stool pv for 5 mth which started immediately following obstructed labor for 2 days, in hospital kunya sb male, married 2 yr ago pre(menarche 1 mth later), no living with husband, no menstruation, drop foot R (grade) and L (grade), no yankan gishiri, eclampsia yes; ?ap diameter?/pubic arch 85°, ar pos, cervix fixed, ulcer L buttock, severe stenosis/shortening, bilateral atf/atl + pc_ilc_iscm loss euo/f 2 cm, f/c 0 cm, i/v 6 cm 149 cm

operation: assessment

duration: 10 min

healing

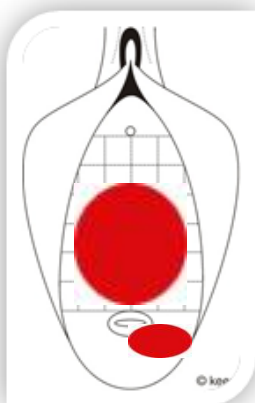
continence

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

since **all tissues inflamed/scarred** and **everything fixed** due to continuous passing stools pv uvvf **"inoperable"**

first rvf-repair but not now since heavy stool contamination

then if rvf healed after 3 mth re-evaluation since tissues may improve



	RR
preanesthesia:	120/70 mm Hg
5':	120/70
10':	120/70
postoperation:	120/70

pt 291

kano mdg
anterior trauma

cath aajaj

s I f-d (katsina)

female

16 yr

18.09.11

diagnosis: PII (all alive), urine intrinsic_stress incontinence grade III as physiologic healing phase of atonic bladder, **leaking urine whilst lying/sitting/standing/walking + normal miction for 38 days** which started 2 days after obstructed last labor of 2 days, in hospital (1 day) daura live female, married 3 yr ago post(menarche 3 mth earlier), still living with husband, no menstruation, no drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, eclampsia yes; normal ap diameter/wide pubic arch 90°, ar pos avw bulging; healed superficially "traumatized" 4 cm 0 avw euo/avw"t" 2 cm, avw"t"/cervix 0 cm 145 cm

19.09.11 no suprapubic mass, avw bulging into vagina, euo/bw 12 cm, poor anterior elevation, euo/b 1 cm (**vesicalization**)
normal bladder capacity (longitudinal diameter 12-1 = 11 cm)
poor position of uv-junction **against** caudad third of symphysis
1 cm good-quality urethra_euo in a natomic position
seems like ühysiologic healing phase of atonic bladder
first **bladder drill** for 2-4 wk then for re-evaluation

19.09.11 improvement

pt 292
pt

kano mdg
post IIBb repair katsina/5x delivery

vvf 4670
vvf 2379/.3223

z m k (katsina)

female

32 yr

20.09.11

surgeon: kees waaldijk

assistant: binta musa

diagnosis: PVI (3 alive), total post **Bb** 5x delivery intrinsic_stress incontinence, leaking urine whilst lying/sitting/standing/walking + spontaneous miction for 18 yr which started immediately following obstructed labor for 2 days, in hospital stillborn male infant, married 30 yr ago pre(menarche 7 mth later), still living with husband, normale menstruation, drop foot R (grade 4-5) and L (grade 5), no rvf, no yxankan gishiri, eclampsia yes; normal ap dia meter/pubis arch 85°, bilateral atf/atl + pc_ilc_iscm loss, cystocele ++, 1-2° cervix prolapse **nb** delivered 2x hosp (sb) + 3x gida (live) obesity +++ narrow euo in anatomic position euo/c 5 cm **very good hygiene** euo/bw 12 cm, poor elevation, euo/b 0.4 cm 155.5 cm

operation: urethralization by longitudinal "pcf" repair

duration: 20 min healing 85% continence 70%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision at 2 cm from euo at skin graft edge, sharp dissection, poor-quality tissue, longitudinal repair of 4x2 cm median "fascia" defect by single layer of serafit, euo/b now 3.6 cm, **no** urine thru euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw_symphysis/fascia_avw_cervix adaptation by 2x everting seralon, hemostasis check; free urine flow, euo/bw 13 cm, good anterior elevation, euo/b 3.6 cm (**urethralization_compression**)

normal bladder capacity (longitudinal diameter 13-3.6 = 9.5 cm)

good position of uv-junction **against** third of symphysis

median-quality fascia plate poor-quality pcm

normal-width 3.5 cm medium urethra_euo in anatomic position

the **problem: poor-quality tissue by fatty degeneration + long-standing leaking**

RR

preanesthesia: 150/90 mm Hg

5': 140/80

10': 130/80

postoperation: 130/80

pt 293

kano mdg

vvf 4671

total circumferential + iatrogenic trauma

rvf

d m w (kano)

female

22 yr

20.09.11

surgeon: kees waaldijk

assistant: binta musa

diagnosis: PIII (0 alive), **mutilated** ± 3 cm 0 urethrovesicovaginal fistula type **IIAb** with circumferential defect, leaking urine of 7 mth that started immediately following cs wudil bco obstructed last labor for 2 days, sb male, married 10 yr ago pre(menarche 1 yr later), no living at husband, no menstruation, drop foot R (grade 3) and L (grade 5), tusa pv, no rvf, no yankan gishiri, no eclampsia; normal ap diameter/pubic arch 85°, ar pos, bilateral atf/atf + pc_ilc_iscm loss, cervix fixed/moving on cough, operated 1x (wudil) euo/f 1.5 cm, f/c 1 cm, ab/au 1 cm, i/v 10 cm 146 cm

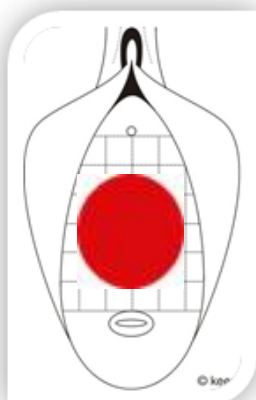
operation: **ps-like** uvvf-repair

duration: 30 min

healing 70% continence 40%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

re-episiotomy, though ureter prolapse it cannot be catheterized, incision at fistula edge, sharp dissection, **under tension** transverse **ps-like** avw_symphysis_urethra/bladder_avw_cervix adaptation by 4x everting seralon, midline urethra/bladder adaptation by 1x inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, on bladder flushing **no** urine thru suture line, check on hemostasis, skin closure; free urine flow, euo/bw 9 cm, good anterior elevation, euo/b 1.4 cm normal bladder capacity (longitudinal diameter 9-1.4 = 7.5 cm) **no** rvf identified acceptable position of uv-junction **fixed against** middle/caudad third of symphysis since slightly deformed 1.5 cm poor-quality urethra_euo posteriorly pulled inside
the problem: poor-quality tissue under tension + nonoptimal nutritional condition



RR
 preanesthesia: 120/70 mm Hg
 5': 120/70
 10': 120/70
 postoperation: 120/70

pt 294

kano mdg

vvf 4672/4308

total circumferential trauma; nicely healed

rvf

s g g (kano)

female

24 yr

20.09.11

surgeon: kees waaldijk

assistant: asmau

diagnosis: PII (0 alive), residual 0.1 cm urethrovesicovaginal fistula L type **IIAb/Bb** almost next 0.5 cm to euo thru which urine ++ on cough following repair 1.6.09, not living with husband, normal menstruation, successful proximal **RVF-repair** gwarzo, no yankan gishiri; normal AP diameter/pubic arch 85°, AR pos, bilateral atf/atl + pc_ ilc_ iscm loss, proximal lpl stricture, vvf-repair 2x (gwarzo_ff graft + 11.8.08 mmsh_im), obesity +, **objective** intrinsic_stress thru fistula, cervix fixed deformed euo drawn inside euo/f 0.5 cm, f/c 4 cm, ab/au xx cm, i/v 10 cm 148.0 cm

operation: uvvf-repair + bilateral pcf fixation

duration: 25 min

healing 85% continence 85%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

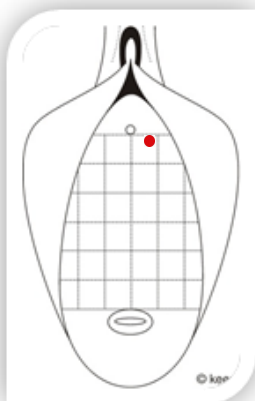
open urethra_euo drawn inside euo/b 1.2 cm

longitudinal incision thru fistula, sharp dissection, excision of 1 cm fistula tract, tension-free longitudinal urethra closure by 1x continuous serafit, bilateral fixation of scarred pcf onto para-euo atf by 1x serafit each side (at R closed; at L open), euo/b 1.5 cm, **no** urine thru euo on rest/cough/pressure, triple fixation of foley ch 18 with longitudinal avw adaptation check on hemo stasis; free urine flow, euo/bw 14 cm, good anterior elevation, euo/b 1.5 cm **though nicely healed now still previous mutilation**

normal bladder capacity (longitudinal diameter 14-1.5 = 12.5 cm)

poor position of UV-junction **fixed against** caudad third of symphysis

normal-width 1.5 cm medium-quality urethra_euo in anatomic position



RR

preanesthesia: 130/80 mm Hg

5': 120/70

10': 120/70

postoperation: 120/70

pt 295

kano
anterior trauma

mdg vvf 073

s u-b (kano)

female

19 yr

20.09.11

surgeon: dr idris suleiman abubakar

assistant: aisha shehu

diagnosis: PII (1 alive), \pm 3 cm 0 urethrovesicovaginal fistula type **IIAa**, leaking urine for 9 mth which started immediately following obstructed labor for 4 days, in hospital (3 days) rano sb male, married 6 yr ago pre(menarche 1 mth later), not living with husband, normal menstruation, drop foot R (grade) and L (grade), no rvf, no yankan gishiri, no eclampsia; normal ap diameter/pubis arch 85°, ar pos, cervix fixed midline, operated 1x (laure) euo/f 3 cm, f/c 0 cm, i/v 11 cm 146 cm

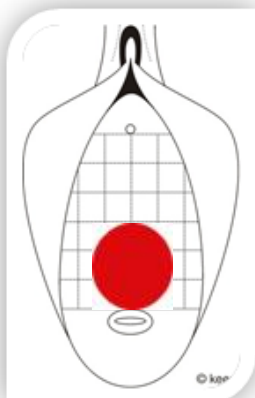
operation: uvvf-repair

duration: 45 min

healing 75% continence 85%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

episiotomy R, ureters **not** identified, incision at fistula edge, sharp dissection, tension-free longitudinal bladder_urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, avw adaptation by 2x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 10 cm, good anterior elevation, euo/b 3 cm
normal bladder capacity (longitudinal diameter 10-3 = 7 cm)
good position of uv-junction **against** middle third of symphysis
normal-width 3 cm good-quality urethra_euo in anatomic position



RR
preanesthesia: 140/100 mm Hg
5': 130/90
10': 120/80
postoperation: 120/70

pt 296

kano

mdg

vvf 074

anterior + iatrogenic trauma

z l k-n (kano city)

female

23 yr

20.09.11

surgeon: dr idris suleiman abubabar

assistant: naomi

diagnosis: PIII (2 alive), \pm 1 cm 0 tah-cs-vesicovaginal fistula type **I** at midline, **leaking urine for 52 days** which started immediately following tah-cs sheikh jiddah hospital bco obstructed last labor for 1 day, sb male, married 10 yr ago post(menarche 2 mth earlier), still living with husband, no menstruation, drop foot R (grade 4) and L (grade 4), no rvf, no yankan gishiri, no eclampsia; normal ap diameter/pubic arch 85°, ar post, cervix remnants fixed midline
 euo/f 7cm, f" c" 0 cm, i/v 12 cm 171 cm

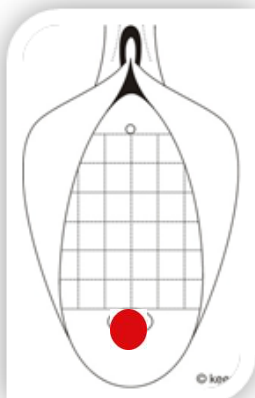
operation: tah-cs-vvf-repair

duration: 45 min

healing 85% continence 85%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

episiotomy R, incision at fistula edge, sharp dissection, tension-free transverse bladder closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemo stasis, skin closure; free urine flow, euo/bw 15 cm, good anterior elevation, euo/b 3 cm normal bladder capacity (longitudinal diameter 14-3 = 11 cm)
 good position of uv-junction **against** middle third of symphysis
 normal-width 3 cm good-quality urethra_euo in anatomic position



RR

preanesthesia: 150/100 mm Hg
 5': 130/80
 10': 130/80
 postoperation: 130/80

pt 297
pt

kano
total circum trauma

rvf 770/589/626/705
vfv 3669/3827/.4155

z a z (kano city) female 36 yr 21.09.11

surgeon: kees waaldijk

assistant: binta musa

diagnosis: PVII (4 alive), residual \pm 2 cm 0 proximal rectovaginal fistula fixed to midline sacrum with circumferential defect/**closed** distal loop type **lc** following multiple repairs 26.9.06 .. 21.07.09, **still** living with husband, normal menstruation, drop foot R (grade 4-5 against 3-4) and L (grade 4-5 against 3), no yankan gishiri; normal AP diameter/pubis arch 85°, AR pos, **major** pc_ic muscle loss, empty pelvis
uvvf healed with stress I-II which constitutes **no problem to her**
she insists on rvf-repair since that is her problem
l/f 12 cm, i/v 12 cm 151.0 cm

operation: **wide** opening up of closed distal loop

duration: 10 min (**extensive teaching**)

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

RE reveals that distal loop is closed
sharp/blunt **wide** opening at proximal closed distal loop, check on hemostasis
since heavy stool contamination fasigyn/chloramphenicol + iv fluids

for re-evaluation and possible vaginal repair in 2-3 weeks: distal rectum to posterior cervix closure so that cervix os still ends into vagina

cervix fixed midline and os/canal identified

RR
preanesthesia: 150/100 mm Hg
5': 140/90
10': 130/80
postoperation: 130/80

pt 298

kano

mdg

vvf 075

h y k (kano)

female

43 yr

21.09.11

surgeon: dr idris suleiman abubakar

assistant: aisha shehu

diagnosis: PX (7 alive), total post repair intrinsic-stress grade III, leaking urine whilst lying/sitting/standing/walking + "spontaneous" miction for 1 yr that started immediately following last twin labor for 1 day, 1 live male in kura and 1 live male mmsh, married 28 yr ago post(menarche 2 yr earlier), still living with husband, no menstruation, no drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no eclampsia; normal ap diameter/pubis arch 85°, ar pos, cervix mobile
euo/bw 13 cm, poor elevation, euo/b 0.6 cm, i/v cm 152 cm

operation: bilateral fixation of pcf

duration: 30 min

healing 85% continence 85%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision thru repair scar, sharp dissection, bilateral fixation of pc fascia onto paraurethra atf by 3x serafit each side, euo/b 1.6 cm, **no** urine thru euo on rest/cough/pressure, foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 13 cm, good anterior elevation, euo/b 1.6 cm normal bladder capacity (longitudinal diameter 13-1.6 = 11.5 cm)
poor position of uv-junction **against** caudad third of symphysis
normal-width 1.5 cm medium-quality urethra_euo in anatomic position

RR

preanesthesia: 130/90 mm Hg

5': 120/80

10': 120/80

postoperation: 120/80

pt 299

kano

mdg

vvf 076

r l k (kano)

female

24 yr

22.09.11

surgeon: dr idris suleiman abubakar

assistant: aisha sheu

diagnosis: PI (0 alive), post **IIAb** intrinsic-stress incontinence grade II, leaking urine whilst standing/walking following successful uvvf/rvf-repair (mmsh) leaking urine for 1 yr which started immediately following cs mmsh bco obstructed twin labor for 7 days, sb ?? twins, married 3 yr ago post(menarche 8 yr earlier), not living with husband, normal menstruation, drop foot R (grade 4) and L (grade 4), rvf **healed**, no yankan gishiri, no eclampsia; ap diameter/pubic arch, ar pos, cervix euo/bw 11 cm, moderate elevation, euo/b 0.4 cm 157 cm

operation: pcf fixation

duration: 30 min

healing 95% continence 85%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision thru repair scar, sharp dissection, bilateral fixation of pc fascia onto paraurethra atf by 2x serafit each side, euo/b 2 cm, **no** urine thru suture euo on rest/ cough/pressure, foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 11 cm, good anterior elevation, euo/b 2 cm normal bladder capacity (longitudinal diameter 11-2 = 9 cm) acceptable position of uv-junction **against** middle/caudad third of symphysis normal-width 2 cm medium-quality urethra_euo in anatomic position

RR

preanesthesia: 130/80 mm Hg

5': 130/80

10': 130/80

postoperation: 130/80

pt 300

kano

mdg

vvf 077

?operabile? extensive circumferential obstetric trauma

a a g-d (kano)

female

15 yr

22.09.11

surgeon: dr amir imam yola

assistant: binta musa

diagnosis: PI (0 alive), **extensive** ± cm 0 urethrovesicovaginal fistula type **IIBb**, proximal 2 cm 0 rectovaginal fistula type **Ib**, leaking urine/passing stools pv for 6 mth for which started immediately following obstructed labor for 5 days days, in hospital (2 days) sb male, married 1.5 yr ago pre(menarche 2 mth later), not living with husband, no menstruation, drop foot R (grade 1) and L (grade 3), no yankan gishiri, eclampsia yes; ?ap diameter?/pubic arch 85°, ar pos, cervix fixed, proximal lpl stricture, severe stenosis euo/f 0 cm, f/c 0 cm, i/v 6 cm cm

operation: assessment

duration: 10 min

healing

continence

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

extensive 4 cm 0 uvvf from "euo" to cervix with circumferential defect, direct longitudinal bladder diameter 3 cm, total avw loss, 2 cm proximal rvf fixed onto cervix is this **??operable??**
better refer to chief consultant



RR
preanesthesia: 120/70 mm Hg
5': 120/70
10': 120/70
postoperation: 120/70

pt 301

kano

mdg

vvf 078

h y r (kano)

female

15 yr

22.09.11

surgeon: dr idris suleiman abubakar

assistant: binta musa

diagnosis: PI (0 alive), \pm cm 0 urethrovesicovaginal fistula type , leaking urine for 6 mth which started immediately following obstructed labor for 3 days, in hospital sb male, married 2 yr ago pre(menarche 2 mth later), not living with husband, no menstruation, drop foot R (grade 2) and L (grade 5), no rvf, no yankan gishiri, no eclampsia; ap diameter/pubis arch, ar pos, cervix , severe vagina stenosis/shortening
euo/f cm, f/c cm, i/v cm 156 cm

operation: assessment

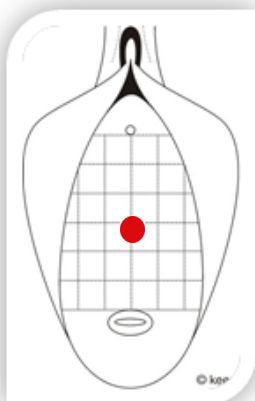
duration: 5 min

healing

continence

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

vagina admits one finger with difficulty, severe scarring, everything fixed better refer to chief consultant



RR
preanesthesia: 120/70 mm Hg
5': 120/70
10': 120/70
postoperation: 120/70

pt 302 kano mdg vvf 079/4336
pt post IIAb delivery vvf 807
pt third obstetric leakage vvf 1165/1617

f m d (kano city) female 32 yr 23.09.11

surgeon: dr idris suleiman abubakar

assistant: aisha shehu

diagnosis: PVII (0 alive), still post **IIAb** delivery total urine intrinsic_stress incontinence following pcf fixation 24.06.09, leaking urine whilst lying/sitting/standing/walking (no spontaneous miction), still living with husband, normal menstruation, no (h/o) drop foot R (grade 5) and L (grade 5), RVF **healed**, no yankan gishiri, no eclampsia; normal AP diameter/narrow pubic arch 70°, AR pos, major bilateral atf/atl + pc_io_ilc_iscm loss, **empty** pelvis, lpl stricture, obesity +++
EUO/C 4 cm **open** urethra_euo in "anatomic" position
EUO/BW 16 cm, poor elevation, EUO/B 0.6 cm, i/v 10 cm 158.0 cm

operation: paraurethra_euo fixation of pc fascia **last resort final**

duration: 20 min healing 95% continence 50%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision at 1 cm from euo thru repair scar, sharp dissection, bilateral distal fixation of poor-quality proximal pcf onto para-euo atf/symphysis by 2x serafit each side, now euo/b 1.6 cm, **no** urine thru euo on rest/cough/pressure, foley ch 18, transverse avw adaptation by 2x everting sedralon, check on hemostasis; free urine flow, euo/bw 16 cm, good anterior elevation, euo/b 1.6 cm
increased bladder capacity (longitudinal diameter 16-1.6 = 14.5 cm)
poor position of UV-junction **against** caudad third of symphysis
normal-width 1.5 cm poor-quality urethra_euo in anatomic position

RR
preanesthesia: 130/80 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

pt 303

kano

mdg

vvf 080

f u s t (kano city)

female

21 yr

23.09.11

surgeon: dr idris suleiman abubakar

assistant: aisha shehu

diagnosis: PI (0 alive), post **IIAb** total intrinsic-stress incontinence grade III, leaking urine whilst lying/sitting/standing/walking + spontaneous miction following 2x repair (laure), married 4 yr ago post(menarche 4 yr earlier), still living with husband, normal menstruation, drop foot R (grade) and L (grade), no rvf, no yankan gishiri, no eclampsia; ap diameter/narrow pubic arch, ar pos, lpl stricture
euo/bw 16 cm, poor elevation, euo/b 1 cm, i/v cm cm

operation: pcf fixation

duration: 30 min

healing 95% continence 60%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

bilateral severing of lpl stricture, transverse incision thru repair scar, sharp dissection, bilateral fixation of pcf onto paraurethra atf by serafit, euo/b 1.6 cm, **no** urine thru euo on rest but \pm on cough, foley ch 18, transverse avw adaptation by 2x everting seralon, check hemostasis; free urine flow, euo/bw 16 cm, good anterior elevation, euo/b 1.6 cm increased bladder capacity (longitudinal diameter 16-1.6 = 14.5 cm)
poor position of uv-junction **against** caudad third of symphysis
normal-width 1.5 cm poor-quality urethra_euo in anatomic position

RR

preanesthesia: 130/90 mm Hg

5': 130/80

10': 130/80

postoperation: 120/80

pt 304
pt 305

katsina
anterior + cut-thru trauma

vvf 8173
rvf 1035

r a f (katsina)

female

21 yr

17.10.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PIV (1 alive), \pm 2 cm 0 urethrovesicovaginal fistula type **IIAa** midline with bladder base prolapse, sphincter ani rupture with 2.5 cm longitudinal ano rectum trauma, leaking urine/stool/flatus incontinence for 4 mth which started immediately following obstructed last labor for 2 days, in hosp (1 day) sb male, married 8 yr ago post(menarche 1 mth earlier), still living with husband, no menstruation, drop foot R (grade 4-5) and L (grade 5), no yankan gishiri, no h/o eclampsia; normal ap diameter/**wide** pubic arch 90°, ar pos, cervix mobile, no s/o operation
euo/f 3.5 cm, f/c 0 cm, a/f 0 cm, i/v 11 cm 152.5 cm

operation: ureters + uvvf-repair + anorectum/sphincter ani/perineal body repair

duration: 60 min (**step-by-step teaching** healing/continence **both** 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

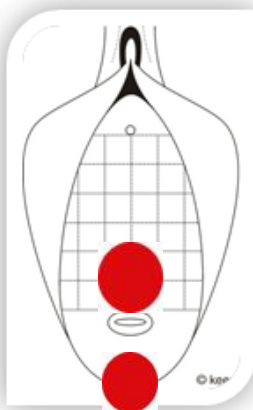
bilateral ureter catheterization for 20 cm, incision at fistula edge, sharp dissection, tension-free transverse bladder/urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avv/cervix adaptation by 2x everting seralon,; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 1.8 cm

normal bladder capacity (longitudinal diameter 12-1.8 = 10 cm)

acceptable position of uv-junction **against** middle/caudad third of symphysis

normal-width 2 cm good-quality urethra_euo in anatomic position

incision at pwv edge with freshening of sphincter ani ends, minimal sharp dissection, longitudinal anorectum closure with adaptation_rhaphy of internal sphincter over cm up to anocutaneous junction (with repositioning of anterior anus) by double layer of inverting interrupted/continuous serafit, inner ring of external sphincter adapted, end-to-end external sphincter ani reconstruction by 2x serafit, perineal body repair with (in)direct re-union of transversus perinei muscles and (in)direct posterior re-union of bulbocavernosus muscles by 2x serafit, perineum well adapted with anus in anatomic position, check on hemostasis



RR
preanesthesia: 130/80 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

pt 305
pt 304

katsina
anterior + cut-thru trauma

rvf 1035
vuf 8173

r a f (katsina)

female

21 yr

17.10.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PIV (1 alive), \pm 2 cm 0 urethrovesicovaginal fistula type **IIAa** midline with bladder base prolapse, sphincter ani rupture with 2.5 cm longitudinal ano rectum trauma, leaking urine/stool/flatus incontinence for 4 mth which started immediately following obstructed last labor for 2 days, in hosp (1 day) sb male, married 8 yr ago post(menarche 1 mth earlier), still living with husband, no menstruation, drop foot R (grade 4-5) and L (grade 5), no yankan gishiri, no h/o eclampsia; normal ap diameter/**wide** pubic arch 90°, ar pos, cervix mobile, no s/o operation
euo/f 3.5 cm, f/c 0 cm, a/f 0 cm, i/v 11 cm 152.5 cm

operation: ureters + uvvf-repair + anorectum/sphincter ani/perineal body repair

duration: 60 min (**step-by-step teaching** healing/continence **both** 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

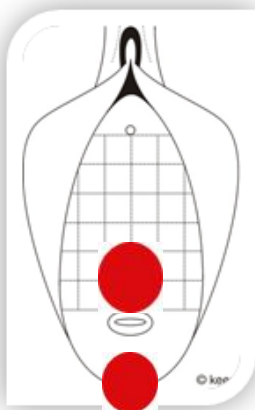
bilateral ureter catheterization for 20 cm, incision at fistula edge, sharp dissection, tension-free transverse bladder/urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw/cervix adaptation by 2x everting seralon,; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 1.8 cm

normal bladder capacity (longitudinal diameter 12-1.8 = 10 cm)

acceptable position of uv-junction **against** middle/caudad third of symphysis

normal-width 2 cm good-quality urethra_euo in anatomic position

incision at pwv edge with freshening of sphincter ani ends, minimal sharp dissection, longitudinal anorectum closure with adaptation_rhaphy of internal sphincter over cm up to anocutaneous junction (with repositioning of anterior anus) by double layer of inverting interrupted/continuous serafit, inner ring of external sphincter adapted, end-to-end external sphincter ani reconstruction by 2x serafit, perineal body repair with (in)direct re-union of transversus perinei muscles and (in)direct posterior re-union of bulbocavernosus muscles by 2x serafit, perineum well adapted with anus in anatomic position, check on hemostasis



RR
preanesthesia: 130/80 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

anteriobilateral + iatrogenic trauma

r s k (gombe)

female

20 yr

17.10.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PI (0 alive), \pm 0.2 cm 0 lungu-lingu fistulas R/L circumferential defect type **IIAb**, leaking urine for 5 yr which started immediately following cs bco obstructed labor for 4 days, sb male, married 7 yr ago pre(menarche 2 mth later), not living with husband, normal menstruation, bilateral drop foot for 3 mth R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no eclampsia; normal ap diameter/pubis arch 85°, ar pos, bilateral atf/atl + pc_ilc_iscm loss, cervix fixed/moving, operated 9.1.11 (b/r_id) euo/f 2/3 cm, f/c 2/1 cm, ab/au xx cm, i/v 10 cm 144,5 cm

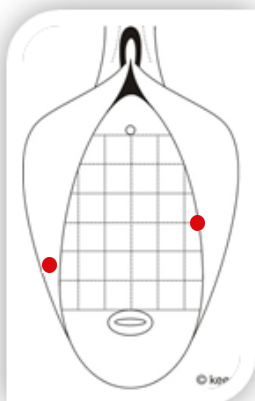
operation: uvvf-repair 2x

duration: 40 min

healing 85% continence 85%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

re-episiotomy I, large transverse incision thru fistulas/repair scar edge, sharp dissection, excision of scar tissue +, the only thing which can be done tension-free bilateral suturing bladder over fistula onto pubic bone by single layer of serafit, **no** urine thru suture line/ euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 2.6 cm
 normal bladder capacity (longitudinal diameter 12-2.6 = 9.5 cm)
 good position of uv-junction **fixed against** middle third of symphysis
 deformed 2.5 cm medium-quality urethra_euo posteriorly pulled inside by fixed cervix
 the **problem: scar tissue + pull by fixed/moving cervix**



RR
 preanesthesia: 130/80 mm Hg
 5': 120/80
 10': 120/80
 postoperation: 120/70

total circumferential + iatrogenic trauma

b f a (ondo) female 25 yr 29.05.11

surgeon: kees waaldijk

assistant: kabir lawal

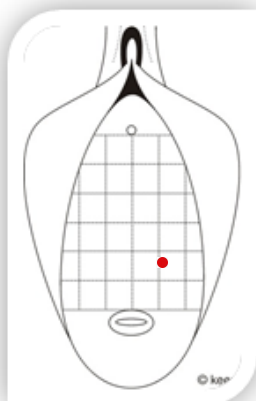
diagnosis: PI (0 alive), residual 0.1 cm urethrovesicovaginal fistula type **IIAb** slightly at L as **good result of primary suturing** 29.5.11, still living with husband, normal menstruation, drop foot R (grade 5) and L (grade 5) nor mal ap diameter/pubic arch 85°, ar pos, bilateral atf/atl + pc_iloc_iscm loss, cervix fixed midline, operated 2x (fmc owo) **no longer visible mutilation**
 euo/f 2.5 cm, f/c 1 cm, ab/au 1 cm, i/v 10 cm 158.0 cm

operation: uvvf-repair + bilateral pcf refixation

duration: 30 min healing 85% continence 85%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

re-episiotomy L, large transverse incision thru fistula/repair scar, minimal sharp dissection, excision if scar tissue +, since tissues "mobile" transverse pc fascia repair/bilateral refixation onto paraurethra_euo atf by 2x serafit each side with transverse fistula closure by single layer iof inverting serafit, **no** urine thru suture line but **+** thru euo on cough, triple fixation of foley ch 18, check on hemostasis, skin closure, pack; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 2.6 cm
 normal bladder capacity (longitudinal diameter 12-2.6 = 9.5 cm)
 good position of uv-junction **fixed against** middle third of symphysis
 slight traumatized 2 cm medium-quality urethra_euo in anatomic position
 the **problem: mutilation + pull by fixed cervix** **good chance of total recovery**



RR
 preanesthesia: 200/120 mm Hg
 5': 170/110
 10': 160/100
 postoperation: 150/90

anterior + iatrogenic trauma

h a g-f (katsina)

female

16 yr

17.10.11

surgeon: dr halliru idris

assistant: gambo lawal

diagnosis: PI, minute < 0.1 cm 0 vesicovaginal fistula type I midline, leaking urine for 1 yr which started immediately following cs bco obstructed labor for 1 day, sb male, married 3 yr ago post(menarche 3 mth earlier), not living with husband, normal menstruation, drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no eclampsia; normal ap diameter/pubis arch 85°, ar pos, cervix fixed midline
euo/f 6 cm, f/c 0 cm, i/v cm 151.0 cm

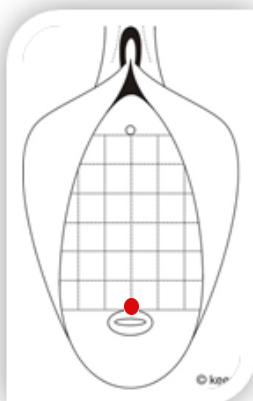
operation: vvf-repair

duration: 30 min

healing 95% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision thru fistula, sharp dissection, tension-free transverse bladder closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, foley ch 18, transverse avw/cervix adaptation by 2x everting seralon, hemostasis check, skin closure; free urine flow, euo/bw 13 cm, good anterior elevation, euo/b 2.6 cm normal bladder capacity (longitudinal diameter 13-2.6 = 10.5 cm)
good position of uv-junction **against** middle third of symphysis
normal-width 2.5 cm good-quality urethra_euo in anatomic position



	RR
preanesthesia:	120/70 mm Hg
5':	120/70
10':	120/70
postoperation:	120/70

pt 309

katsina mdg
anterior trauma

vvf 082

u l k s (katsina)

female

31 yr

17.10.11

surgeon: dr halliru idris

assistant: gambo lawal

diagnosis: PVII (6 alive), ± 0.5 cm 0 urethrovesicovaginal fistula type I at R cervix, leaking urine for 4 mth which started immediately following obstructed last labor for 1 day, in hospital sb male, married 18 yr ago post(menarche 3 mth earlier), still living with husband, no menstruation, drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no eclampsia; normal ap dia meter/pubis arch 85°, ar pos, cervix mobile
euo/f 7 cm, f/c 0 cm, i/v cm 150.0 cm

operation: vvf-repair

duration: 30 min

healing 95% continence 95%

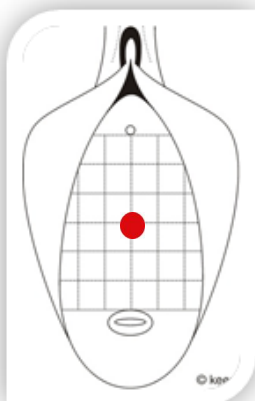
anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision at fistula edge, sharp dissection, tension-free transverse bladder closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw/cervix adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 12 cm, moderate anterior elevation, euo/b 2.5 cm

normal bladder capacity (longitudinal diameter 12-2.5 = 9.5 cm)

good position of uv-junction **against** middle third of symphysis

normal-width 2.5 cm good-quality urethra_euo in anatomic position



RR
preanesthesia: 130/80 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

pt 310

katsina

vvf 8176

total circumferential trauma

u l a c city

female

17 yr

18.10.11

surgeon: kees waaldijk

assistant: kabir lawal

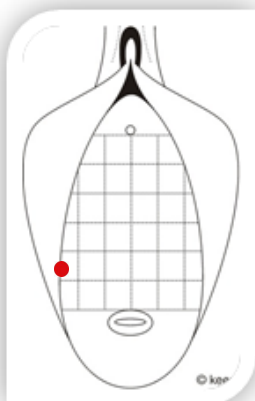
diagnosis: PI (0 alive), ± 0.2 cm 0 urethrovesicovaginal fistula R lungu with circumferential defect type **IIAb** within 5x1 cm transverse pcf defect, leaking urine for 2 yr which started immediately following obstructed labor for 2 days, at home sb male, married 4 yr ago post(menarche 2 mth earlier), not living with husband, normal menstruation, bilateral drop for 1 mth foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no eclampsia; normals ap diameter/pubic arch 85°, ar pos, bilateral atf/atl + pc_ilc_iscm loss, cervix fixed midline, proximal lpl stricture, operated 27.04.10 (b/r_id) euo/f 3 cm, f/c 1 cm, ab/au xx cm, i/v 8 cm 154.0 cm

operation: transverse pcf repair/bilateral refixation + uvvf-repair

duration: 40 min healing 85% continence 85%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

re-episiotomy, large transverse incision thru fistula/repair scar, sharp dissection, transverse tension-free pc fascia repair/bilateral fixation onto paraurethra_euo atf/symphysis by 2x serafit each side with transverse fistula closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw/avw_cervix adaptation by 2x everting seralon, check on hemostasis, epi closure; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 2.2 cm normal bladder capacity (longitudinal diameter 12-2.2 = 10 cm) good position of uv-junction **fixed against** middle third of symphysis normal-width 2.2 cm poor-quality urethra_euo in anatomic position
the problem: fibrosis, poor-quality tissue + pull by fixed cervix



RR
 preanesthesia: 130/80 mm Hg
 5': 130/80
 10': 120/80
 postoperation: 120/70

pt 311
pt

katsina
is this the same patient; see name/history

vvf 8177
vvf 7201

r
z m m (rép niger) female 33 yr 18.10.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PVII (5 alive), total post **IIAb** intrinsic_stress incontinence grade III, leaking urine whilst lying/sitting/standing/walking + spontaneous miction for 5 mth following a period of fever/pain, married 20 yr ago post(menarche 1 mth earlier), still living with husband, normal menstruation, drop foot R (grade 5) and L (grade 4), no rvf,, no yankan gishiri, no eclampsia; normal ap diameter/pubis arch 85°, ar pos, bilateral atf/atl + pc_ilc_iscm loss, cervix mobile, definitely circum repair, cystocele ++
euo/bw 13 cm, poor elevation, euo/b 0.3 cm, i/v 12 cm 155.0 cm

operation: urethralization by longitudinal fascia repair/bilateral fixation

duration: 30 min healing 95% continence 90%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse curved incision at 1 cm from euo thru repair scar, sharp dissection, median 5x2 cm fascia defect from cervix up to 1 cm to euo, longitudinal repair of good-quality fascia at 1-5 cm from euo by single layer of serafit, already continence after 2 sutures, bilateral fixation of fascia to para-euo atf by 1x serafit both side, euo/b 1.4 cm, **no** urine thru euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw_pcf/sym physis_avw adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/b 13 cm, good elastic anterior elevation, euo/b 1.4 cm (**urethralization**)
normal bladder capacity (longitudinal diameter 13-1.4 = 11.5 cm)
poor position uv-junction **against** caudad third symphysis
good fascia plate poor-quality pcm **no longer** cystocele
normal-width 1.5 cm medium-quality urethra_euo in anatomic position
from all indications this will **normalize under physiologic stress**

RR
preanesthesia: 130/80 mm Hg
5': 120/80
10': 120/70
postoperation: 120/70

pt 312	katsina	vvf 8178
pt	third obstetric fistula	vvf 7026
pt	anteriobilateral trauma	vvf 6695

h u j (katsina)	female	26 yr	18.10.11
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surgeon: kees waaldijk

assistant: kabir lawal

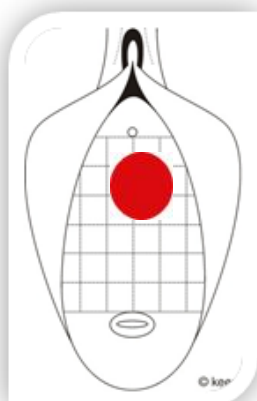
diagnosis: PVI (2 alive), **mutilated** \pm 2.5 cm 0 urethrovesicovaginal fistula type **IIBb** midline/L with circumferential defect, **leaking urine for 74 days** which started immediately following cs bco obstructed last labor for 2 days, sb male, married 13 yr ago pre(menarche 2 mth later), not living with husband, menstruation, drop foot R (grade 5) and L (grade 3), no rvf, no yankan gishiri, no eclampsia; normal ap diameter/borderline pubic arch 80°, ar pos, bilateral atf/atl + pc_ilc_iscm loss, cervix fixed/retracted euo/f 1 cm, f/c 4 cm, ab/au xx cm, i/v 13 cm 150.0 cm

operation: ureter L + 4/5 circumferential uvvf-repair + bilateral pcf refixation

duration: 45 min healing 80% continence 60%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

re-episiotomy L, only L ureter identified/catheterized for 20 cm, incision at fistula edge, sharp 4/5 circumferential dissection, tension-free 4/5 circumferential uvvf-repair by end-to-end vesicourethrostomy by single layer of inverting serafit but bladder tears out at multiple places, bilateral fixation of pc fascia onto paraurethra_euo atf/symphysis by 2x serafit each side, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by **4x (to assist inversion of complicated repair)** everting seralon, hemostasis check, skin closure; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 1.2 cm
 normal bladder capacity (longitudinal diameter 12-1.2 = 11 cm)
 poor position of uv-junction **fixed against** caudad third of symphysis
 normal-width 1 cm **poor-quality** urethra_euo in anatomic position



	RR
preanesthesia:	130/80 mm Hg
5':	130/80
10':	130/80
postoperation:	130/80

pt 313

katsina

vvf 8179

anterior + iatrogenic trauma

h r b (katsina)

female

16 yr

18.10.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PI, \pm 2.5x2 cm transverse urethrovesicovaginal fistula type **IIAa** with bladder base prolapse, **leaking urine for 68 days** which started immediately following cs bco obstructed labor for 2 days, sb female, married 3 yr ago pre(menarche 1 mth later), not living with husband, no menstruation, drop foot R (grade 4-5) and L (grade 5), no rvf, no yankan gishiri, eclampsia no; normal ap diameter/pubis arch 85°, ar pos, cervix fixed midline euo/f 3.5 cm, f/c 0 cm, i/v 12 cm 140.0 cm

operation: catheterization R ureter + uvvf-repair

duration: 40 min

healing 95% continence 95%

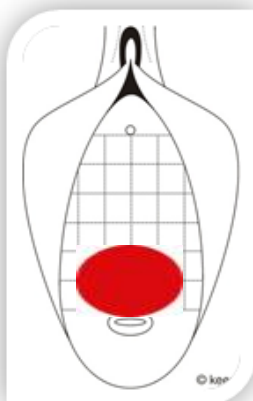
anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

small episiotomy L, only R ureter identified/catheterized for 20 cm, **no** urine from L, incision at fistula edge, sharp dissection, tension-free transverse bladder_cervix/urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw/cervix adaptation by 2x everting seralon, hemostasis check, skin closure; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 3.1 cm

normal bladder capacity (longitudinal diameter 12-3.1 = 9 cm)

good position of uv-junction **against** middle third of symphysis

"normal-width" 3 cm good-quality urethra_euo in anatomic position



RR
preanesthesia: 140/90 mm Hg
5': 130/80
10': 130/70
postoperation: 120/70

pt 314

katsina mdg
anterior + iatrogenic

vvf 083

h i u (rép niger)

female

16 yr

18.10.11

surgeon: dr halliru idris

assistant: gambo lawal

diagnosis: PI (0 alive), \pm 1 cm 0 cs-vesicocervicovaginal fistula type I midline, **leaking urine for 75 days** which started immediately following cs bco obstructed labor for 3 days (2 days at home), sb male, married 3 yr ago pre(menarche 1 mth later), not living with husband, no menstruation, drop foot R (grade 4) and L (grade 4), no rvf, no yankan gishiri, no eclampsia; normal ap diameter/pubic arch 85°, ar pos, cervix fixed midline euo/f 6 cm, f/c 1 cm, i/v cm 148.5 cm

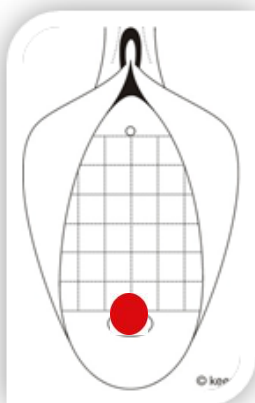
operation: cs-vcvf-repair

duration: 30 min

healing 90% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision thru/at fistula edge, sharp dissection, tension-free transverse bladder closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, foley ch 18, transverse avw/cervix adaptation by 2x everting seralon, hemostasis check; free urine flow, euo/bw 12 cm, anterior elevation, euo/b 2.6 cm normal bladder capacity (longitudinal diameter 12-2.6 = 9.5 cm) good position of uv-junction **against** middle third of symphysis normal-width 2.6 cm good-quality urethra_euo in anatomic position



	RR
preanesthesia:	140/80 mm Hg
5':	130/80
10':	120/70
postoperation:	120/70

pt 315

katsina mdg
anterior trauma

vvf 084

s s y (katsina)

female

19 yr

18.10.11

surgeon: halliru idris

assistant: gambo lawal

diagnosis: PII (1 alive), \pm 0.5 cm 0 urethrovesicovaginal fistula type **IIAa** slightly at R, **leaking urine for 46 day** which started immediately following obstructed last labor for 1 day, at home live male who died 5 days later, married 6 yr ago post(menarche 5 mth earlier), not living with husband, no menstruation, no drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no eclampsia; normal ap diameter/pubis arch 85° , ar pos, cervix mobile euo/f 4 cm, f/c 2 cm, i/v cm 146.5 cm

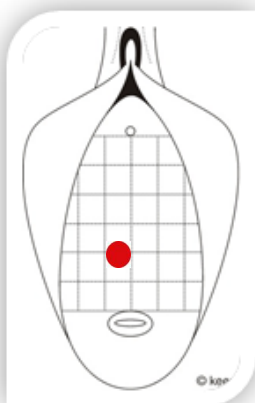
operation: uvvf-repair

duration: 25 min

healing 95% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision thru/at fistula edge, sharp dissection, tension-free transverse bladder/urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, foley ch 18, transverse avw adaptation by 2x everting seralon, hemostasis check; free urine flow, euo/bw 13 cm, good anterior elevation, euo/b 2 cm normal bladder capacity (longitudinal diameter $13-2 = 11$ cm) acceptable position of uv-junction **against** middle/caudad third symphysis normal-width 2 cm good-quality urethra_euo in anatomic position



RR
preanesthesia: 140/90 mm Hg
5': 130/80
10': 120/80
postoperation: 120/70

pt 316

katsina mdg
anterior + iatrogenic

vvf 085

I a w (katsina)

female

34 yr

18.10.11

surgeon: dr kabiru abubakar

assistant: gambo lawal

diagnosis: PX (7 alive), \pm 1.5 cm 0 cs-vesicocervicovaginal fistula type **I** at midline, **leaking urine for 68 days** which started immediately following cs bco obstructed labor for 3 days (2 days at home), sb male, married 22 yr ago pre(menarche 1 yr later), still living with husband, no menstruation, drop foot R (grade 3-4) and L (grade 4), no rvf, no yankan gishiri, eclampsia no; normal ap diameter/pubis arch 85°, ar pos, cervix fixed midline euo/f 6 cm, f/c 0 cm, i/v cm 149.0 cm

operation: cs-vcvf-repair

duration: 40 min

healing 90% continence 90%

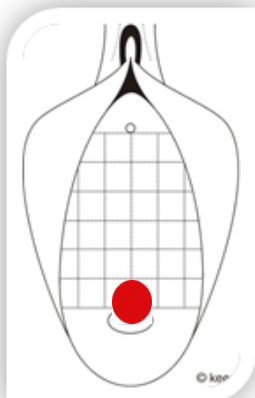
anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

median episiotomy, incision at fistula edge, sharp dissection, tension-free transverse bladder closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, foley ch 18, transverse avw/cervix adaptation by 2x everting seralon, hemostasis check, skin closure; free urine flow, euo/bw 11 cm, good anterior elevation, euo/b 2.5 cm

normal bladder capacity (longitudinal diameter 11-2.5 = 8.5 cm)

good position of uv-junction **against** middle third of symphysis

normal-width 2.5 cm good-quality urethra_euo in anatomic position



RR
 preanesthesia: 130/80 mm Hg
 5': 130/80
 10': 130/80
 postoperation: 130/80

pt 317

katsina mdg
anterior + iatrogenic

vvf 086

h a y (katsina)

female

30 yr

18.10.11

surgeon: dr kabiru abubakar

assistant: gambo lawal

diagnosis: PX (4 alive), intracervical \pm 2 cm 0 urethrovesicovaginal fistula type I with anterior cervix loss, leaking urine for 3 mth which started immediately following cs bco obstructed last labor for 1 day, live female, married 17 yr ago post(menarche 1 mth earlier), still living at husband, no menstruation, drop foot R (grade 4-5) and L (grade 4-5), no rvf, no yankan gishiri, no eclampsia; normal ap diameter/pubis arch 85°, ar pos, cervix fixed midline euo/f 6 cm, f/c 0 cm, i/v cm 145.0 cm

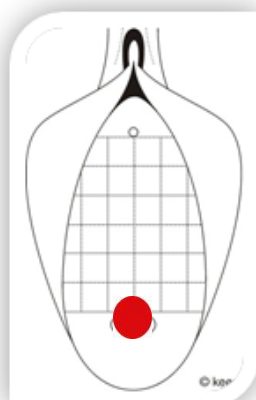
operation: **complicated** cs-vcvf-repair

duration: 60 min

healing 85% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

median episiotomy, incision at fistula edge, sharp dissection, tension-free transverse longitudinal bladder closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw/cervix adaptation by 2x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 1.5 cm
normal bladder capacity (longitudinal diameter 12-1.5 = 10.5 cm)
poor position of uv-junction **against** caudad third of symphysis
normal-width 1.5 cm good-quality urethra_euo in anatomic position



RR
preanesthesia: 130/80 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

pt 318
pt 319

katsina
total circumferential + severe iatrogenic

vvf 8180
rvf 1036

m h k (katsina)

female

15 yr

19.10.11

surgeon: kees waaldijk

assistant: kabir lawal

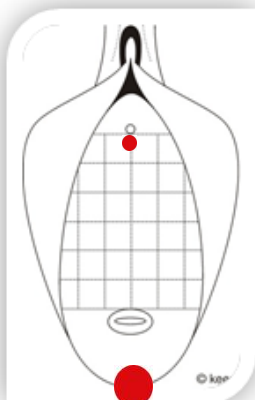
diagnosis: PI (0 alive), \pm 0.3 cm 0 urethrovaginal fistula with circumferential defect type **IIA/Bb**, partially "healed" sphincter ani type **IIb** with **mutilated** 1.5 cm long anorectum trauma, leaking urine/stool/flatus incontinence for 5 mth which started immediately following obstructed labor of 2 days, in hospital sb male, married 2 yr ago post(menarche 2 mth earlier), not living with husband, no menstruation, drop foot R (grade 3-4) and L (grade 3-4), no yankan gish iri, eclampsia yes; normal ap diameter/pubis arch 85°, ar pos, bilateral atf/atl + pc_iloc_iscm loss, cervix fixed/retracted, operated 2x (maiduguri_lagos), **objective** intrinsic_stress **++**, cystocele **++**
euo/f 0.3 cm, f/c 6 cm, ab/au xx cm, a/f 0 cm, i/v 12 cm 150.0 cm

operation: uvvf-repair + longitudinal fascia repair + anorectum/sphincter/pb repair

duration: 60 min healing **both** 85% continence **u_s** **85_95%**

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

severing poorly "healed" sphincter, transverse incision at 2.5 cm from euo with longitudinal midline extension up to uvf, **actually** uvf runs into euo, sharp dissection, 5x1.5 cm median fascia defect from cervix up to 1 cm to euo, longitudinal repair of scarred fascia/"urethra" at 0-5 cm from euo by single layer of serafit, euo/b 2.2 cm, **no** urine thru suture line/euo on rest/cough/pressure, fixation to paraurethra atf **intact**, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 2.2 cm pat not cooperative, stool contamination normal bladder capacity (longitudinal diameter 12-2.2 = 10 cm) **no cystocele**
good position of uv-junction **fixed against** middle third of symphysis
normal-width 2 cm **poor-quality** urethra_euo in anatomic position
incision at pwv edge with freshening of sphincter ani ends, minimal sharp dissection, longitudinal poor-quality anorectum closure with adaptation_rhaphy of internal sphincter over 2 cm up to anocutaneous junction (with repositioning of anterior anus) by double layer of inverting interrupted/continuous serafit, inner ring of external sphincter adapted, end-to-end external sphincter ani reconstruction by 2x serafit, perineal body repair with (in)direct re-union of transversus perinei muscles and (in)direct posterior re-union of bulbocavernosus muscles by 2x serafit, perineum well adapted with anus in anatomic position, check on hemostasis
the **problem: iatrogenic mutilation**



RR
preanesthesia: 120/70 mm Hg
5': 120/70
10': 120/70
postoperation: 120/70

pt 319
pt 318

katsina
total circumferential + severe iatrogenic

rvf 1036
vfv 8180

m h k (katsina)

female

15 yr

19.10.11

surgeon: kees waaldijk

assistant: kabir lawal

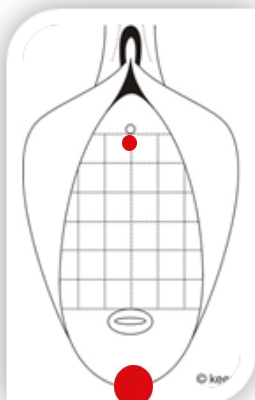
diagnosis: PI (0 alive), \pm 0.3 cm 0 urethrovaginal fistula with circumferential defect type **IIA/Bb**, partially "healed" sphincter ani type **IIb** with **mutilated** 1.5 cm long anorectum trauma, leaking urine/stool/flatus incontinence for 5 mth which started immediately following obstructed labor of 2 days, in hospital sb male, married 2 yr ago post(menarche 2 mth earlier), not living with husband, no menstruation, drop foot R (grade 3-4) and L (grade 3-4), no yankan gish iri, eclampsia yes; normal ap diameter/pubis arch 85°, ar pos, bilateral atf/atl + pc_iloc_iscm loss, cervix fixed/retracted, operated 2x (maiduguri_lagos), **objective** intrinsic_stress **++**, cystocele **++**
euo/f 0.3 cm, f/c 6 cm, ab/au xx cm, a/f 0 cm, i/v 12 cm 150.0 cm

operation: uvvf-repair + longitudinal fascia repair + anorectum/sphincter/pb repair

duration: 60 min healing **both** 85% continence **u_s** **85_95%**

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

severing poorly "healed" sphincter, transverse incision at 2.5 cm from euo with longitudinal midline extension up to uvf, **actually** uvf runs into euo, sharp dissection, 5x1.5 cm median fascia defect from cervix up to 1 cm to euo, longitudinal repair of scarred fascia/"urethra" at 0-5 cm from euo by single layer of serafit, euo/b 2.2 cm, **no** urine thru suture line/euo on rest/cough/pressure, fixation to paraurethra atf **intact**, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 2.2 cm pat not cooperative, stool contamination normal bladder capacity (longitudinal diameter 12-2.2 = 10 cm) **no cystocele**
good position of uv-junction **fixed against** middle third of symphysis
normal-width 2 cm **poor-quality** urethra_euo in anatomic position
incision at pwv edge with freshening of sphincter ani ends, minimal sharp dissection, longitudinal poor-quality anorectum closure with adaptation_rhaphy of internal sphincter over 2 cm up to anocutaneous junction (with repositioning of anterior anus) by double layer of inverting interrupted/continuous serafit, inner ring of external sphincter adapted, end-to-end external sphincter ani reconstruction by 2x serafit, perineal body repair with (in)direct re-union of transversus perinei muscles and (in)direct posterior re-union of bulbocavernosus muscles by 2x serafit, perineum well adapted with anus in anatomic position, check on hemostasis
the **problem: iatrogenic mutilation**



RR
preanesthesia: 120/70 mm Hg
5': 120/70
10': 120/70
postoperation: 120/70

pt 320

katsina
anteriobilateral trauma

vvf 8181

a s d m (katsina)

female

35 yr

19.10.11

surgeon: kees waaldijk

assistant: kabir lawal

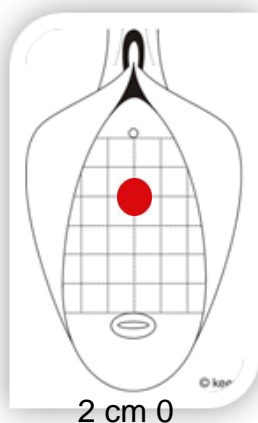
diagnosis: PVI (2 alive), \pm 2 cm 0 urethrovesicovaginal fistula type **IIAb** fixed onto cephalad third of symphysis with circumferential defect within 7x2 cm pcf defect, leaking urine of 20 yr that started immediately following obstructed first labor for 4 days, in hospital sb female, married 21 yr ago post(menarche 8 mth earlier), still living with husband, normal menstruation, bilateral drop foot for 3 mth R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no h/o eclampsia; nor mal ap diameter/pubis arch 85°, ar pos, bilateral atf/atl + pc_ilc_iscm loss, cervix retracted/fixed (cs for another delivery) euo/f 3 cm, f/c 6 cm, ab/au 1 cm, i/v **19** cm obesity ++ 158.0 cm

operation: **complicated** 4/5 circumferential uvvf-repair + bilateral pcf refixation

duration: 50 min (**step-by-step teaching**) healing 85% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

small episiotomy L, large transverse incision thru/at fistula/pcf defect, sharp 4/5 circumferential dissection, tension-free 4/5 circumferential uvvf-repair by end-to-end vesicourethrostomy by single layer of inverting serafit, bilateral fixation of pc fascia to paraurethra_euo atf/symphysis by 2x serafit each side, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 13 cm, good anterior elevation, euo/b 3.2 cm **?never?** operated
normal bladder capacity (longitudinal diameter 13-3.2 = 10 cm)
good position of uv-junction **fixed against** middle third of symphysis
normal-width 3 cm good-quality urethra_euo in anatomic position



RR
preanesthesia: 130/80 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

pt 321

katsina

vuf 8182/8108

post IIBa repair; nicely healed

r b m (katsina)

female

13 yr

19.10.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: P0, post **IIBa** total urine intrinsic_stress incontinence grade III, leaking urine whilst lying/sitting/standing/walking + spontaneous miction following continent urethra reconstruction 14.06, not living at husband, normal menstruation; normal ap diameter/pubis arch 90°, ar pos, cervix mobile euo/c 5 cm **open** urethra_euo posteriorly drawn inside euo/bw 12 cm, moderate elevation, euo/b 0.8 cm, i/v 10 cm 164.0 cm

operation: paraurethra_euo fixation of pc fascia

duration: 15 min

healing 95% continence 85%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision at 2 cm from euo thru repair scar, sharp dissection, bilateral distal fixation of good-quality proximal pc fascia onto para-euo at/symphysis by 2x serafit each side with urethra_euo repositioning/stabilization and fascia tightening, now euo/b 1.5 cm, **no** urine thru euo on rest/cough/pressure, triple fixation of foley ch 18 transverse avw adaptation by 2x everting seralon, hemostasis check; free urine flow, euo/bw 12 cm, good elastic anterior elevation, euo/b 1.5 cm (**urethralization**) normal bladder capacity (longitudinal diameter 12-1.5 = 10.5 cm) poor position of uv-junction **against** caudad third of symphysis good fascia plate good-quality pcm normal-width 1.5 cm good-quality urethra_euo in anatomic position

RR

preanesthesia: 120/70 mm Hg

5': 120/70

10': 120/70

postoperation: 120/70

b m g (katsina)

female

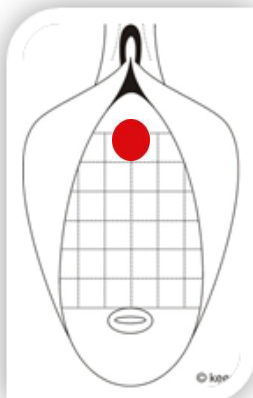
14 yr

10.10.11

diagnosis: PI (0 alive), total urine intrinsic_stress incontinence grade III, **leaking urine whilst lying/sitting/standing/walking + no spontaneous miction for 18 days** which started immediately following obstructed labor for 2 days, in hospital sb male, married 1 yr ago post(menarche 5 mth earlier), not living with husband, no menstruation, drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, eclampsia yes; normal ap diameter/pubis arch 85°, ar pos
wide open urethra_euo 155.0 cm

10.10.11 foley ch 18; free urine flow, euo/bw 16cm, poor anterior elevation and euo/b 0.5 cm
increased bladder capacity (longitudinal diameter 16-0.5 = 15.5 cm, **an atonic bladder in healing phase**)
poor position of uv-junction **against** caudad third of symphysis
wide-open 0.5 cm poor-quality urethra_euo posteriorly drawn inside first catheter, then bladder drill then for re-evaluation

19.10.11 not leaking at all



anterior trauma; long-standing atonic bladder

h a k (katsina)

female

17 yr

10.10.11

diagnosis: PI (alive), overflow incontinence due to long-standing atonic bladder, leaking urine for 5 mth which started immediately following obstructed labor for 1 day, in hospital live male, married 3 yr ago post(menarche 1 yr earlier), not living with husband, normal menstruation, drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no eclampsia; normal ap diameter/pubis arch 85°, ar pos
 avw bulging, no further visible trauma 170.0 cm

10.10.11 small suprapubic mass, avw bulging into vagina, bladder overdistended (euo/bw 18 cm), poor elevation after draining > 750 ml urine, euo/b 1 cm; foley ch 18; free urine flow,
increased bladder capacity (longitudinal diameter 18-1 = 17 cm, **atonic bladder**)
 poor position of uv-junction **against** caudad third of symphysis
open 1 cm medium-quality urethra_euo posteriorly drawn inside

19.10.11 not leaking at all

pt 324
pt

katsina mdg
katsina

vvf 087
vvf 8064

anteriobilateral + iatrogenic trauma

s l k (katsina) female 30 yr 19.10.11

surgeon: dr halliru idris

assistant: gambo lawal

diagnosis: PVIII (4 alive), untouched \pm 1 cm cs-vcvf after successful uvvf-repair 23.5 as **first stage**, leaking urine for 9 mth which started immediately following cs bco obstructed last labor for 1 day, sb female, married 18 yr ago pre(menarche 1 yr later), not living with husband, normal menstruation, drop foot R (grade 3-4) and L (grade 3-4), no rvf, no yankan gishiri, ho h/o eclampsia; normal ap diameter/pubic arch 85°, ar pos, bilateral att/atl + pc_ilc_iscm loss R >> L, cervix "fixed" towards i spine L, ssl trauma L euo/f 6 cm, f/c 0 cm, i/v 12 cm 150.5 cm

operation: **complicated** cs-vcvf-repair as **second stage**

duration: 60 min healing 70% continence 80%

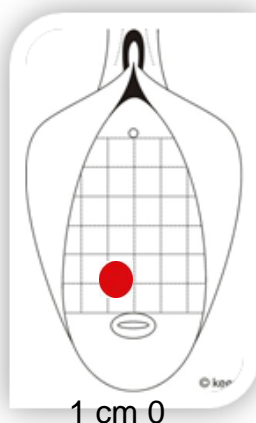
anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision thru/at fistula edge, sharp dissection, scar tissue ++, tension-free transverse bladder/urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, foley ch 18, transverse avw/cervix adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 11 cm, good anterior elevation, euo/b 2 cm

normal bladder capacity (longitudinal diameter 11-2 = 9 cm)

acceptable position of uv-junction **against** middle/caudad third of symphysis

normal-width 2 cm good-quality urethra_euo in anatomic poition



RR
preanesthesia: 130/80 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

anteriobilateral trauma

h y m (rép niger)

female

15 yr

19.10.11

surgeon: dr kabiru abubakar

assistant: gambo lawal

diagnosis: PI (0 alive), \pm 2 cm 0 urethrovesicovaginal fistula type **IIAb** with circumferential defect, **leaking urine for 67 days** which started immediately following cs bco obstructed labor for 2 days, sb female, married 2 yr ago pre(menarche 2 mth later), not living with husband, no menstruation, drop foot R (grade 4) and L (grade 4), no rvf, no yankan gishiri, no eclampsia; normal ap diameter/pubis arch 85°, ar pos, bilateral atf/atl + pc_ilc_iscm loss, cervix fixed midline
euo/f 2 cm, f/c 4 cm, ab/au 1 cm, i/v 12 cm 148.0 cm

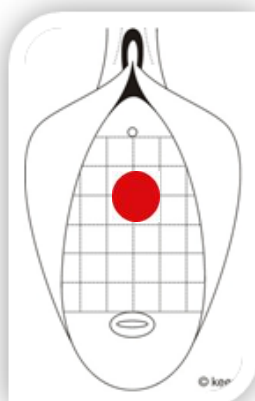
operation: circumferential uvvf-repair + bilateral pcf refixation

duration: 45 min

healing 90% continence 90%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

median episiotomy, transverse incision thru/at fistula edge, sharp circumferential dissection, advancement/caudad fixation of anterior bladder onto symphysis/urethra, tension-free circumferential uvvf-repair by end-to-end vesicourethrostomy by single layer of inverting serafit, bilateral fixation of pc fascia onto paraurethra_euo atf/symphysis by 2x serafit each side, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 2 cm normal bladder capacity (longitudinal diameter 12-2 = 10 cm) acceptable position of uv-junction **fixed against** middle/caudad third of symphysis normal-width 2 cm urethra_euo in anatomic position



2 cm 0

RR
preanesthesia: 120/70 mm Hg
5': 110/70
10': 110/70
postoperation: 100/60

pt 326

anterior + iatrogenic trauma

vvf 019

a l k r b (katsina)

female

20 yr

19.10.11

surgeon: dr kabiru abubakar

assistant: gambo lawal

diagnosis: PII (all alive), residual ± 2.5 cm 0 tah-cs-vesicocervicovaginal fistula type I midline following repair 06.06.11, not living at husband, no menstruation, drop foot R (grade 4-5) and L (grade 4), no rvf, no yankan gishiri, eclampsia yes; normal ap diameter/pubic arch 85° , ar pos, "cervix" fixed euo/f 6 cm, f"/c" 0 cm, i/v 12 cm 150.0 cm

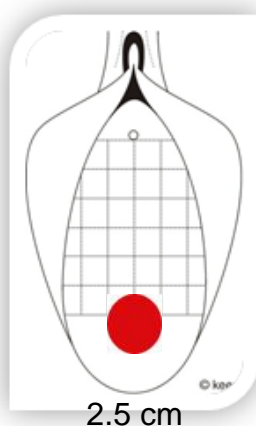
operation: tah-cs-vcvf-repair

duration: 45 min

healing 85% continence 90%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

re-episiotomy L, transverse incision thru/at fistula edge, sharp dissection, excision of scar tissue ++, tension-free longitudinal bladder closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, foley ch 18, transverse avw/pvw adaptation by 2x everting seralon, check on hemostasis, epi closure; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 2.30 cm normal bladder capacity (longitudinal diameter 12-2.3 = 9.5 cm) good position of uv-junction **against** middle third of symphysis normal-width 2.5 cm good-quality urethra_euo in anatomic position



RR
preanesthesia: 120/70 mm Hg
5': 120/70
10': 110/70
postoperation: 110/70

pt 327
pt 328

katsina
total circumferential defect

vvf 8183
rvf 1037

z l d (katsina) female 26 yr 07.07.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PI (0 alive), total **genuine** (post **IIAb**) intrinsic_stress incontinence grade III, 2 cm 0 proximal rectovaginal fistula midline within 4 cm 0 pvw defect , leaking urine/passing stools pv for 4 mth that started immediately after obstructed labor for 3 days, in hospital sb female, married 13 yr ago pre(menarche 1 mth later), not living with husband, no menstruation, drop foot R (grade 5) and L (grade 5), no yankan gishiri, eclampsia yes; normal ap diameter/**wide** pubic arch 90°, ar pos, bilateral atf/atl + pcm trauma, **bladder herniation** thru median fascia defect cervix mobile 158.0 cm euo/bw 13cm, cystocele ++, euo/b 1.1 cm, a/f 6 cm, f/c 4 cm, i/v 12 cm

operation: urethralization: longitudinal fascia repair/transverse fixation + rvf-repair

duration: 60 min obesity ++ healing **u_s 95_85%** continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

bilateral re-episiotomy L, transverse curved incision at 1.5 cm from euo thru transverse 5x1 cm pcf defect, sharp dissection, longitudinal 5x2 cm median pcf defect from cervix up to 1.5 cm to euo, longitudinal repair of median fascia defect at 1.5-5 cm from euo by single layer of serafit with normalization of urethra_euo, euo/b 2.3 cm, **no** urine thru euo on rest/cough/pressure, bilateral fixation of fascia onto paraurethra_euo atf by 2x serafit each side, euo/b 2.3 cm, **no** urine thru euo on rest/cough/pressure, triple fixation of foley ch Ch 18, transverse avw adaptation by 2x everting seralon,; free urine flow, euo/b 13 cm, good elastic anterior elevation, euo/b 2.3 cm (**urethralization**)
normal bladder capacity (longitudinal diameter 13-2.3 = 10.5 cm)
good position uv-junction **against** middle third symphysis
normal-width 2.5 cm good-quality urethra_euo in anatomic position
incision at rvf edge, minimal sharp dissection, at first suture heavy stool contamination throughout, tension-free gtransverse rectum c,losure by double layer of inverting interrupted/continuous serafit, leaving pvw **open**, check on hemostasis, epi's closure fasigyn/chloramphenicol/iv fluids for safety reasons

RR
preanesthesia: 130/80 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

pt 328
pt 327

katsina
total circumferential defect

rvf 1037
vfv 8183

z l d (katsina) female 26 yr 20.10.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PI (0 alive), total **genuine** (post **IIAb**) intrinsic_stress incontinence grade III, 2 cm 0 proximal rectovaginal fistula midline within 4 cm 0 pvw defect , leaking urine/passing stools pv for 4 mth that started immediately after obstructed labor for 3 days, in hospital sb female, married 13 yr ago pre(menarche 1 mth later), not living with husband, no menstruation, drop foot R (grade 5) and L (grade 5), no yankan gishiri, eclampsia yes; normal ap diameter/**wide** pubic arch 90°, ar pos, bilateral atf/atl + pcm trauma, **bladder herniation** thru median fascia defect cervix mobile 158.0 cm euo/bw 13cm, cystocele ++, euo/b 1.1 cm, a/f 6 cm, f/c 4 cm, i/v 12 cm

operation: urethralization: longitudinal fascia repair/transverse fixation + rvf-repair

duration: 60 min obesity ++ healing **u_s 95_85%** continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

bilateral re-episiotomy L, transverse curved incision at 1.5 cm from euo thru transverse 5x1 cm pcf defect, sharp dissection, longitudinal 5x2 cm median pcf defect from cervix up to 1.5 cm to euo, longitudinal repair of median fascia defect at 1.5-5 cm from euo by single layer of serafit with normalization of urethra_euo, euo/b 2.3 cm, **no** urine thru euo on rest/cough/pressure, bilateral fixation of fascia onto paraurethra_euo atf by 2x serafit each side, euo/b 2.3 cm, **no** urine thru euo on rest/cough/pressure, triple fixation of foley ch Ch 18, transverse avw adaptation by 2x everting seralon,; free urine flow, euo/b 13 cm, good elastic anterior elevation, euo/b 2.3 cm (**urethralization**)
normal bladder capacity (longitudinal diameter 13-2.3 = 10.5 cm)
good position uv-junction **against** middle third symphysis
normal-width 2.5 cm good-quality urethra_euo in anatomic position
incision at rvf edge, minimal sharp dissection, at first suture heavy stool contamination throughout, tension-free gtransverse rectum c,losure by double layer of inverting interrupted/continuous serafit, leaving pvw **open**, check on hemostasis, epi's closure fasigyn/chloramphenicol/iv fluids for safety reasons

RR
preanesthesia: 130/80 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

pt 329

katsina
post IIAa repair

vvf 8184/8116

h l g b (rép niger)

female

20 yr

20.10.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PIII (all alive), post **IIAa** total urine intrinsic_stress incontinence grade III, leaking urine whilst lying/sitting/standing/walking + “spontaneous” miction following uvvf-repair 3.7.11, still living with husband, normal menstruation, drop foot R (grade 5) and L (grade 5), no rvf, no eclampsia; normal ap diameter/ **wide** pubic arch 95°, ar pos, cervix mobile
euo/c 2 cm **open** urethra_euo posteriorly drawn inside due to scarring
euo/bw 13 cm, good elevation, euo/b 1.2 cm, i/v 10 cm 156.5 cm

operation: paraurethra_euo fixation of pc fascia

duration: 15 min

healing 95% continence 85%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision at 2 cm from euo thru repair scar, sharp dissection, excision of scar tissue over urethra ++, bilateral distal fixation of medium-quality proximal pc fascia onto para-euo symphysis by x serafit each side with urethra_euo repositioning/stabilization and fascia tightening, now euo/b 1.2 cm, **no** urine thru euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw/cervix adaptation by 2x everting seralon, hemostasis check; free urine flow, euo/bw 13 cm, good anterior elevation, euo/b 1.2 cm normal bladder capacity (longitudinal diameter 13-1.2 = 12 cm)
poor position of uv-junction **against** caudad third of symphysis
good fascia plate good-quality pcm
normal-width 1.2 cm good-quality urethra_euo in anatomic position
it will normalize under physiologic stress

RR

preanesthesia: 120/70 mm Hg

5': 120/70

10': 120/70

postoperation: 120/70

anteriobilateral trauma; second obstetric fistula

a r m (katsina) female 30 yr 20.10.11

surgeon: kees waaldijk

assistant: kabir lawal

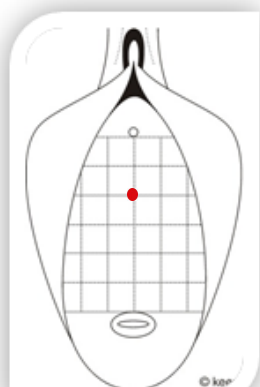
diagnosis: PVII (1 alive), minute < 0.1 cm 0 urethrovesicovaginal fistula midline with circumferential defect type **IIAb**, leaking urine for 4 yr which started immediately following obstructed last labor of 1 day, in hospital live female, married 17 yr ago pre(menarche 3 mth later), still living with husband, normal menstruation, drop foot R (grade 4) and L (grade 4), no rvf, no yankan gishiri, no eclampsia; normal ap diameter/pubic arch 85°, ar pos, bilateral atf/atl + pc_io_ilc_iscm loss, cervix mobile, repair delivery I (b/r_ke) transverse 5x1 cm pc fascia defect **objective stress ++** euo/f 2 cm, f/c 4 cm, ab/au xx cm, i/v 11 cm 154.0 cm

operation: transverse pcf repair/bilateral pcf refixation + uvvf-repair

duration: 40 min healing 95% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

re-episiotomy L, large transverse incision thru/at fistula edge, sharp dissection, tension-free transverse fascia repair/bilateral refixation onto paraurethra_euo atf by 2x serafit each side with transverse bladder/urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 15 cm, good anterior elevation, euo/b 1.9 cm normal bladder capacity (longitudinal diameter 15-1.9 = 13 cm) acceptable position of uv-junction **fixed against** middle/caudad third of symphysiys normal-width 2 cm good-quality urethra_euo in anatomic position



minute < 0.1 cm 0

RR
 preanesthesia: 120/70 mm Hg
 5': 110/70
 10': 110/70
 postoperation: 110/70

pt 331

katsina

vvf 8186

“inoperable” type IIBb; total circum trauma

rvf

m m m (katsina)

female

28 yr

20.10.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PVIII (3 alive), **“inoperable”** ± 5 cm 0 urethrovesicovaginal fistula with circumferential defect type **IIBb**, ± 2 cm 0 proximal rectovaginal fistula type **Ic** fixed to sacrum midline/cervix with circumferential defect, leaking urine/ passing stools pv for 7 mth that started immediately following obstructed last labor for 2 days, in hospital sb female, married 14 yr ago post (menarche 1 yr earlier), not living with husband, no menstruation, drop foot R (grade 2) and L (grade 2) both with gm_at contracture ip to 95/+5° dorsi flexion, no yankan gishiri, no eclampsia; normal ap diameter/pubic arch 85°, ar pos, bilateral atf/atl + pc_iloc_iscm loss, cervix fixed midline, bladder base prolapse, proximal lpl stricture, **everything fixed**
 euo/f 1 cm, f/c 0 cm, ab/au 3 cm, i/v 12 cm 150.0 cm

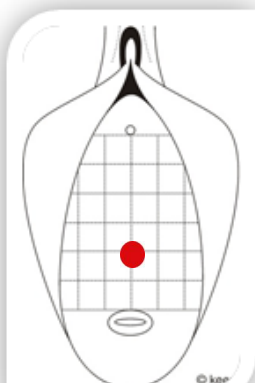
operation: ureters, circumferential uvvf-repair + bilateral pcf refixation as **first stage**

duration: 45 min

healing 60% continence 0%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

episiotomy L with severing of stricture, bilateral ureter catheterization for 20 cm, incision at fistula edge, sharp circumferential dissection, advancement/caudad fixation of poor-quality anterior bladder onto symphysis/urethra, **under tension** circumferential uvvf-repair by end-to-end vesicourethrostomy by single layer of inverting serafit, bilateral fixation of pc fascia onto paraurethra_euo atf/symphysis by 2x serafit each side, repair **not** water-tight, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon but remains distal 2 cm broad gap, check on hemostasis, skin closure; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 0.5 cm
 normal bladder capacity (longitudinal diameter 12-0.5 = 11.5 cm)
 poor position of uv-junction **fixed against** caudad third of symphysis
 normal-width 0.5 cm **poor-quality** urethra_euo in anatomic position
 the **problem: poor-quality tissue/everything fixed due to continuous stool contamination thru “end-standing” sigmoidostomy into vagina**
 if it heals like fixed with urethra loss that would be already good result



“inoperable” 5 cm 0

RR

preanesthesia: 120/70 mm Hg
 5': 120/70
 10': 120/70
 postoperation: 120/70

pt 332

katsina
anterior trauma

cath 1385

n n z (katsina)

female

15 yr

20.10.11

diagnosis: PI (alive), overflow incontinence due to long-standing atonic bladder, leaking urine for 4 mth which started immediately following cs bco obstructed labor for 3 days, live male, married 1.5 yr ago post(menarche 3 mth earlier), not living with husband, no menstruation, drop foot R (grade 4-5) and L (grade 4-5), no rvf, no yankan gishiri, no eclampsia; normal ap diameter/pubis arch 85°, ar pos ?ureter fistula? 146.0 cm

20.10.11 **under spinal**

dye test: **no** leakage, **no clear urine**

avw bulging, bladder overdistended (euo/bw 18 cm), moderate anterior elevation after bladder draining, euo/b 1.2 cm foley ch 18; free urine flow **increased** bladder capacity (longitudinal diameter 18-1.2 = 17 cm, **atonic bladder**)

poor position of uv-junction **against** caudad third of symphysis
normal-width 1 cm medium-quality urethra_euo in anatomic position
first catheter then bladder drill then review

pt 333

katsina mdg
anterior trauma

vvf 090

z i g city

female

16 yr

20.10.11

surgeon: dr halliru a idris

assistant: gambo lawal

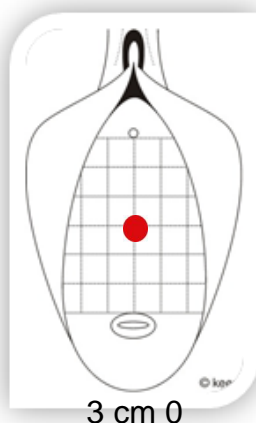
diagnosis: PI, \pm 3 cm 0 urethrovesicovaginal fistula type **IIAa** with bladder base pro
lapse, **leaking urine for 70 days** which started immediately following cs
bco obstructed labor for 1 day, sb male, married 3 yr ago post(menarche
1 mth earlier), not living with husband, no menstruation, drop foot R (gra
de 4) and L (grade 4), rvf, no yankan gishiri, no eclampsia; normal ap dia
meter/pubis arch 85°, ar pos, cervix fixed
euo/f 2.5 cm, f/c 2 cm, i/v cm 156.0 cm

operation: bilateral ureter catheterization + uvvf-repair

duration: 45 min healing 90% continence 90%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

bilateral ureter catheterization for 20 cm, incision at fistula edge, sharp dissection,
tension-free transverse bladder/urethra closure by single layer of inverting serafit, **no**
urine thru suture line/euo on rest/cough/pressure, foley ch 18, transverse avw adapta
tion by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 12 cm, good
anterior elevation, euo/b 2.7 cm
normal bladder capacity (longitudinal diameter 12-2.7 = 9.5 cm)
good position of uv-junction **against** middle third of symphysis
normal-width 2.5 cm good-quality urethra_euo in anatomic position



RR
preanesthesia: 130/80 mm Hg
5': 120/70
10': 120/70
postoperation: 110/79

pt 334

katsina mdg

vvf 091

anterior + iatrogenic trauma

b m m (katsina)

female

37 yr

20.10.11

surgeon: dr kabiru abubakar

assistant: gambo lawal

diagnosis: PXI (6 alive), total post **IIAb** urine intrinsic_stress incontinence grade III, leaking whilst lying/sitting/standing/walking + spontaneous miction for 9 mth which started immediately following obstructed labor for 1 day, in hospital sb male, married 25 yr ago pre(menarche 1 yr later), still living with husband, normal menstruation, drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no eclampsia; normal ap diameter/pubic arch 85!, ar pos, cervix mobile, operated 5.5.11 (b/r_said) euo/bw 12 cm, moderate elevation, euo/b 1.5 cm 159.0 cm

operation: urethralization by longitudinal fascia repair/bilateral fixation

duration: 40 min healing 95% continence 85%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

median episiotomy, transverse incision thru repair scar, sharp dissection, tension-free longitudinal fascia rhapsy over 3 cm by serafit, bilateral fixation onto paraurethra_euo atf by 2x<serafit each side, euo/b 2.3 cm, **no** urine thru euo on rest/cough/pressure, foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 2.3 cm normal bladder capacity (longitudinal diameter 12-2.3 = 9.5 cm) good position of uv-junction **against** middle third of symphysis normal-width 2.5 cm good-quality urethra_euo in anatomic posiiton

RR

preanesthesia: 120/70 mm Hg

5': 120/70

10': 120/70

postoperation: 120/70

anterior + iatrogenic trauma

h i k (katsina)

female

25 yr

20.10.11

surgeon: dr kabiru abubakar

assistant: gambo lawal

diagnosis: PVI (1 alive), \pm 4 cm 0 urethrovesicovaginal fistula type **IIAa** with tissue bridge, leaking urine for 3 mth which started immediately following ?craniotomy? bco obstructed last labor for 2 days (all in hospital), sb male, married 12 yr ago pre(menarche 1 mth later), still living with hus band, no menstruation, drop foot R (grade 4) and L (grade 4), no rvf, no yankan gishiri, no eclampsia; normal ap diameter/pubis arch 85°, ar pos, cervix fixed midline
euo/f 2 cm, f/c 0 cm, i/v cm 145.0 cm

operation: uvvf-repair

duration: 30 min

healing 85% continence 85%

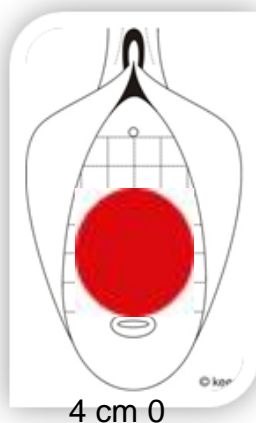
anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

incision at fistula edge, sharp dissection, tension-free longitudinal bladder/urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw/cervix adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 13 cm, good anterior elevation, euo/b 1.5 cm

normal bladder capacity (longitudinal diameter 13-1.5 = 11.5 cm)

poor position of uv-junction **against** caudad third of symphysis

normal-width 1.5 cm good-quality urethra_euo in anatomic position



	RR
preanesthesia:	130/80 mm Hg
5':	130/80
10':	130/80
postoperation:	120/70

pt 336

katsina
anteriobilateral trauma

vvf 8187

s m m (katsina)

female

15 yr

21.10.11

surgeon: dr amadou issa abdou/kees waaldijk

assistant: kabir lawal

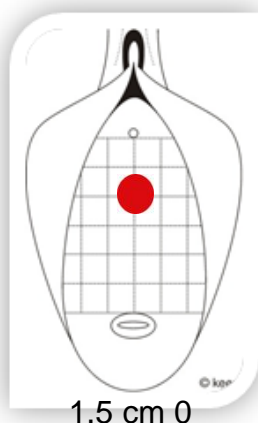
diagnosis: PI (0 alive), \pm 1.5 cm 0 urethrovesicovaginal fistula type **IIAa** midline with in **healing** 5x1.5 cm transverse avw/pcf defect, **leaking urine for 64 days** which started immediately following obstructed labor for 2 days, in hospital sb male, married 2 yr ago pre(menarche 3 mth later), not living with husband, no menstruation, drop foot R (grade 4) and L (grade 4), no rvf, no yankan gishiri, eclampsia yes; normal ap diameter/pubis arch 85°, ar pos, cervix mobile, bilateral atf/atl trauma **open** urethra_euo
euo/f 2 cm, f/c 4 cm, i/v 12 cm 144.0 cm

operation: transverse pc fascia repair/fixation + uvvf-repair

duration: 50 min healing 85% continence 85%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

re-episiotomy L (not yet healed), transverse incision thru/at fistula edge, sharp dissection, tension-free transverse pc fascia repair/bilateral fixation onto paraurethra atf by 1x serafit each side with transverse bladder/urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 1.6 cm
normal bladder capacity (longitudinal diameter 12-1.6 = 10.5 cm)
poor position of uv-junction **against** caudad third of symphysis
adapted 1.6 cm medium-quality urethra_euo in anatomic position



RR
preanesthesia: 120/70 mm Hg
5': 120/70
10': 120/70
postoperation: 120/70

pt 337

katsina

vvf 8188

anterior trauma + delayed iatrogenic/obstetric trauma

cath 1357

u h d (katsina)

female

21 yr

21.10.11

surgeon: kees waaldijk

assistant: kabir lawal

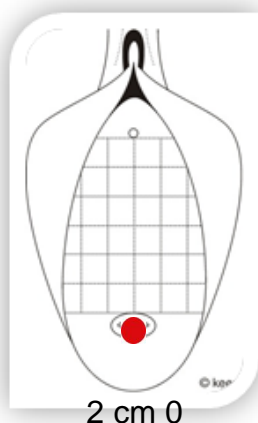
diagnosis: PIII (2 alive), intracervical \pm 2 cm 0 "cs"-vesicocervicovaginal fistula type I midline with **intact os**, leaking urine for 5 mth which started immediately following obstructed labor for 1 day, in hospital live male, married 8 yr ago post(menarche 4 mth realier), still living with husband, no menstruation, drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, eclampsia no h/o; normal ap diameter/pubic arch 85°, ar pos, cervix mobile; **nb cs for delivery II wide open euo and avw bulging into vagina**
 euo/f 8 cm, f/c 0 cm, i/v 12 cm, c_os/f 1 cm 155.0 cm

operation: "cs"-vcvf-repair **obstetric trauma superimposed upon weak cervix**

duration: 40 min healing 95% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

healed small type **IIAa** fistula, fistula detected since urine and then dye from os, incision at anterior cervix, sharp dissection of bladder from cervix, 2 cm 0 bladder defect, tension-free transverse bladder closure by by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, foley ch 18, transverse avw/cervix adaptation by 2x everting seralon, check on hemostasis, epi closure; free urine flow, euo/bw 12 cm, poor anterior elevation, euo/b 0.9 cm
 normal bladder capacity (longitudinal diameter 12-0.9 = 11 cm)
 poor position of uv-junction **against** caudad third of symphysis
open 1 cm medium-quality urethra_euo posteriorly drawn inside
 will distal urethra_euo **normalize** under physiologic stress??



RR

preanesthesia: 130/90 mm Hg
 5': 130/80
 10': 130/80
 postoperation: 130/80

pt 338

katsina mdg

vvf 093

anterior + iatrogenic trauma

z b r/g (katsina)

female

37 yr

21.10.11

surgeon: dr kabiru abubakar

assistant: gambo lawal

diagnosis: PXII (6 alive), \pm 4 cm 0 sth-cs-vesicocervicovaginal fistula type I, leaking urine for 4 mth which started immediately following sth-cs bco obstructed last labor for 1 day, sb female, married 24 yr ago pre(menarche 3 mth later), still living with husband, no menstruation, no drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no eclampsia; normal ap diame ter/pubic arch 85°, ar pos, cervix remnants fixed midline
 euo/f 5 cm, f/c 0 cm, i/v cm 154.0 cm

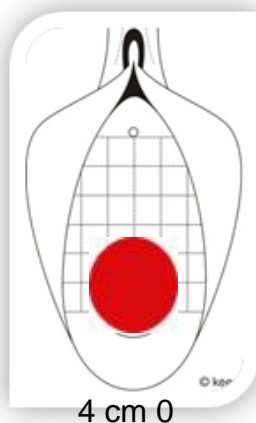
operation: sth-cs-vcvf-repair

duration: 30 min

healing 90% continence 90%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

median episiotomy, no uterus found on palpation, incision at fistula edge, sharp dissection, tension-free transverse bladder/bladder_posterior "cervix" closure by single layer inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, foley ch 18, transverse avw/posterior "cervix" adaptation by 5x everting seralon, hemostasis check, epi closure; free urine flow, euo/bw 11 cm, good anterior elevation, euo/b 1.5 cm normal bladder capacity (longitudinal diameter 11-1.5 = 9.5 cm)
 poor position of uv-junction **against** caudad third of symphysis
 normal-width 1.5 cm good-quality urethra_euo in anatomic position



RR

preanesthesia: 130/90 mm Hg
 5': 120/80
 10': 120/80
 postoperation: 120/80

pt 339
pt

katsina mdg
anteriobilateral trauma; second obstetric fistula

vvf 094
vvf 5847

b a b (katsina) female 27 yr 21.10.11

surgeon: dr kabiru abubakar

assistant: gambo lawal

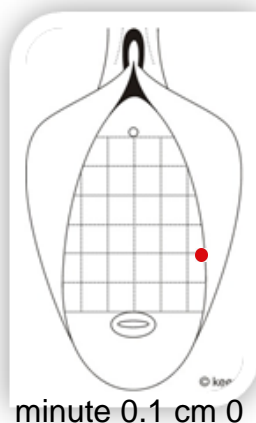
diagnosis: PIII (0 alive), minute < 0.1 cm 0 lungu fistula L type **IIAb**, leaking urine for 1 yr which started immediately following "miscarriage" of 1 day, at home sb male, married 14 yr ago pre(menarche 2 mth later), still living with husband, normal menstruation, drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, eclampsia delivery I; normal ap diameter/pubis arch 85°, ar pos, cervix fixed
euo/f 2 cm, f/c 1 cm, i/v 7 cm 150.0 cm

operation: uvvf-repair + bilateral pcf fixation

duration: 45 min healing 95% continence 80%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

re-episiotomy L, transverse incision thru fistula/repair scar, sharp dissection, tension-free transverse bladder/urethra closure by single layer of inverting serafit, bilateral pcf fixation onto paraurethra_euo atf, **no** urine thru suture line/euo on rest/cough/pressure, foley ch 18, transverse avw adaptation by 3x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 10 cm, good anterior elevation, euo/b 2 cm normal bladder capacity (longitudinal diameter 10-2 = 8 cm) acceptable position of uv-junction **against** middle/caudad third of symphysis normal-width 2 cm good-quality urethra_euo in anatomic position



RR
preanesthesia: 130/80 mm Hg
5': 120/70
10': 120/70
postoperation: 120/70

pt 340

katsina

vvf 8189

total circumferential trauma

a s m c (borno)

female

43 yr

22.10.11

surgeon: kees waaldijk

assistant: kabir lawal

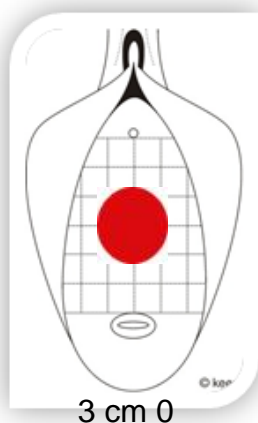
diagnosis: PXII (10 alive), \pm 3 cm 0 urethrovesicovaginal fistula with circumferential defect type **IIAb**, leaking urine for 3 yr which started immediately following obstructed last labor for 1 day, in hospital sb female, married 30 yr ago post(menarche 2 mth earlier), still living with husband, normal menstruation, drop foot R (grade 2) and L (grade 2) with gm_at contracture up to 90/0° dorsiflexion, no rvf, no yankan gishiri, no eclampsia; normal ap diameter/pubis arch 85°, ar pos, bilateral atf/atl + pc_ilc_iscm loss, 2° cervix prolapse, sul trauma/loss obesity +++
 euo/f 2 cm, f/c 2 cm, ab/au 2 cm, i/v 12 cm 154.0 cm

operation: **state-of-the-art** circumferential uvvf-repair + bilateral pcf refixation

duration: 45 min (**step-by-step teaching**) healing 95% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

episiotomy L, transverse incision thru/at fistula edge, sharp circumferential dissection, advancement/caudad fixation of anterior bladder onto symphysis/urethra, tension-free circumferential uvvf-repair by end-to-end vesicourethrostomy by single layer of inverting serafit, bilateral fixation of pc fascia onto paraurethra_euo atf/symphysis by 2x serafit each side, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw/avw_cervix adaptation by 2x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 11 cm, good anterior elevation, euo/b 1.7 cm normal bladder capacity (longitudinal diameter 11-1.7 = 9.5 cm)
 poor position of uv-junction **fixed against** caudad third of symphysis
 normal-width 1.5 cm good-quality urethra_euo in anatomic position



RR

preanesthesia: 140/90 mm Hg
 5': 130/80
 10': 130/80
 postoperation: 130/80

pt 341

katsina

vvf 8190

total circumferential trauma

h m b (borno)

female

21 yr

22.10.11

surgeon: kees waaldijk

assistant: kabir lawal

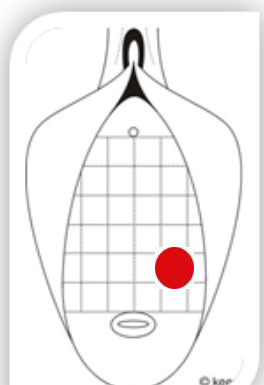
diagnosis: PIII (0 alive), **severely mutilated** ± 1.5 cm 0 urethrovesicovaginal fistula at L with circumferential defect type **IIAb**, leaking urine for 1 yr that started immediately following obstructed last labor for 2 days, in hospital sb female, married 7 yr ago post(menarche 1 yr earlier), not living with husband, normal menstruation, bilateral drop foot for 1 mth R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no eclampsia; normal ap diameter/pubis arch 85°, ar pos, bilateral atf/atl + ilc_iscm loss up to i spines (paraurethra intact), 2° cervix prolapse (due to sul trauma + **large** transverse 7x2 cm pcf defect), operated 2x (maiduguri_chama) for over N 250,000 and then planned for urinary diversion obesity ++
 euo/f 4 cm, f/c 1 cm, ab/au xx cm, i/v 14 cm 154.0 cm

operation: transverse pcf repair/fixation + uvvf-repair

duration: 50 min (**step-by-step teaching**) healing 85% continence 85%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

episiotomy L, large transverse incision thru/at fistula edge, sharp dissection, tension-free transverse fascia repair/bilateral fixation with fistula "closure" by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw/cervix adaptation by 2x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 2.3 cm normal bladder capacity (longitudinal diameter 12-2.3 = 9.5 cm)
 good position of uv-junction **fixed against** middle third of symphysis
 normal-width 2.5 cm good-quality urethra_euo in anatomic position **the good thing**
the problem: severe additional iatrogenic mutilation



mutilated 1.5 cm 0

RR
 preanesthesia: 130/80 mm Hg
 5': 130/80
 10': 130/80
 postoperation: 130/80

pt 342

katsina
third obstetric fistula
anterior trauma (large pcf defect)

vvf 8191
cath 591
cath 1228

h a a (katsina)

female

31 yr

22.10.11

surgeon: kees waaldijk

assistant: kabir lawal

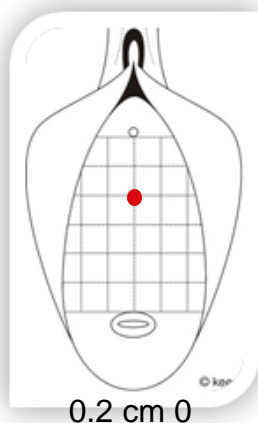
diagnosis: PIX (6 alive), \pm 0.2 cm 0 urethrovesicovaginal fistula type **IIAa** midline within 5x1 cm transverse pcf defect, leaking urine for 3 mth which started immediately following obstructed last labor for 1 day, at home live male, married 18 yr ago post(menarche 1 mth earlier), still living with husband, no menstruation, drop foot R (grade 5) and L (grade 4-5), no rvf, no yankan gishiri, no eclampsia; ap diameter/pubis arch 85°, ar pos, cervix fixed onto i spine R
euo/f 2.5 cm, f/c 4 cm, i/v 12 cm 142.5 cm

operation: transverse pc fascia repair/fixation + uvvf-repair **reconstructive surgery**

duration: 20 min healing 95% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision thru/at fistula/pcfascia defect, sharp dissection, tension-free transverse pc fascia repair/fixation with transverse bladder/urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 1.8 cm
normal bladder capacity (longitudinal diameter 12-1.8 = 10 cm)
poor position of uv-junction **against** caudad third of symphysis
normal-width 2 cm good-quality urethra_euo in anatomic position



RR
preanesthesia: 140/90 mm Hg
5': 140/80
10': 130/80
postoperation: 130/80

pt 343

katsina

vwf 8192/8018

anterior trauma + severe iatrogenic mutilation

n u g (jigawa)

female

38 yr

22.10.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PX (7 alive), total post **severely mutilated extensive IIBa** intrinsic_stress incontinence grade III, leaking urine whilst lying/sitting/standing/walking + **no** spontaneous miction following "reconstruction" 10.2.11, not living with husband, normal menstruation; normal ap diameter/pubis arch 85°, ar pos, 2° cervix prolapse/fixed, operated 2x, obesity +++, **introitus ok normal-width euo totally drawn inside over 2 cm euo/c 2.5 cm euo/bw 10 cm, good elevation, euo/b 0.2 cm, i/v 10 cm 150.5 cm**

operation: euo "repositioning"

last resort final

duration: 10 min

healing 75% continence 50%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

bilateral paraurethra longitudinal incision, stab incision between anterior euo/symphysis, advancement/suturing anterior euo into anatomic position, bilateral excision of some para-euo avw, bilateral fixation of distal paraurethra_euo avw onto symphysis with 2x seralon each side, euo/b 1.6 cm, **no** urine thru suture line/euo on rest/ cough/pressure, foley ch 18, check on hemostasis; free urine flow, euo/bw 10 cm, good anterior elevation, euo/b 1.6 cm (**compression**)
normal bladder capacity (longitudinal diameter 10-1.6 = 8.5 cm)
good position uv-junction **against** middle/caudad third symphysis
normal-width 1.5 cm poor-quality urethra_euo in "anatomic position"
the **problem: excessive mutilation/scar tissue + pull by cervix**

RR

preanesthesia: 150/100 mm Hg

5': 140/90

10': 130/80

postoperation: 130/80

anterior + iatrogenic trauma

a m b borno state

female

57 yr

22.10.11

surgeon: dr halliru a idris

assistant: gambo lawal

diagnosis: PIX (5 alive), minute < 0.1 cm vesicovaginal fistula type I fixed against i spine R, leaking urine for 18 yr which started immediately following cs bco obstructed last labor for 2 days, sb male, married 45 yr ago pre(menarche 1 yr later), still living with husband, menopause 10 yr ago, no drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no eclampsia; normal ap diameter/pubis arch 85°, ar pos, cervix not identified (colpocleisis, ope rated 1x Maiduguri)

euo/f 8 cm, f/v 0 cm, i/v cm

cm

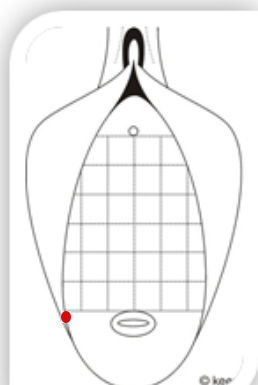
operation: vvf-repair

duration: 40 min

healing 90% continence 80%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision thru fistula, sharp dissection, tension-free transverse bladder closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, foley ch 18, transverse avw/pvw adaptation by 2x everting seralon, hemostasis check; free urine flow, euo/bw 10 cm, good anterior elevation, euo/b 2 cm
normal bladder capacity (longitudinal diameter 10-2 = 8 cm)
acceptable position of uv-junction 10-2 = 8 cm
normal-width 2 cm good-quality urethra_euo in anatomic position



minute < 0.1 cm 0

	RR
preanesthesia:	150/100 mm Hg
5':	140/90
10':	140/90
postoperation:	140/90

pt 345

katsina mdg
anterior + iatrogenic trauma

vvf 096
vvf 045

h d s c (sokoto)

female

26 yr

22.10.11

surgeon: dr halliru idris

assistant: gambo lawal

diagnosis: PII (0 alive), ureter fistula, cs-vcvf-repair 16.07 still living with husband, normal menstruation, drop foot R (grade 4) and L (grade 4), no rvf, no yankan gishiri, no h/o eclampsia; nor mal ap diameter/pubis arch 85°, ar pos, cervix fixed midline
euo/f 5 cm, f/c 0 cm, i/v 11 cm 147.0 cm

operation: assessment

duration: min

healing

continence

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

dye test/ **no** leakage, **no** stress clear urine in vagina but not identified from where
for abdominal implantation by urologist

RR
preanesthesia: 130/80 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

pt 346

katsina mdg

vvf 097

anterior + iatrogenic trauma

m h r (kano city)

female

26 yr

22.10.11

surgeon: dr halliru idris

assistant: gambo lawal

diagnosis: PIII (2 alive), ± 4 cm 0 urethrovesicovaginal fistula type I midline/anterior cervix loss, leaking urine for 4 mth which started immediately following cs bco obstructed last labor for 2 days, sb male, married 12 yr ago post(men arche 1 yr earlier), not living with husband, normal menstruation, no h/o drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, eclampsia no; normal ap diameter/pubis arch 85°, ar pos, cervix fixed midline euo/f 5 cm, f/c 0 cm, i/v cm 162.0 cm

operation: ureter R catheterization + cs-vcvf-repair

duration: 40 min

healing 85% continence 85%

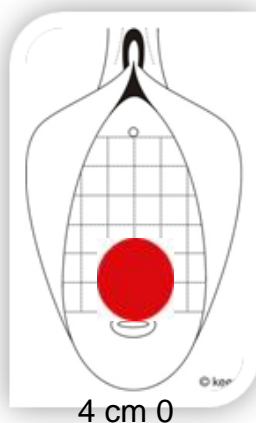
anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

only ureter R identified/catheterized for 20 cm, incision at fistula edge, sharp dissection, tension-free transverse bladder closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, foley ch 18, transverse avw/cervix adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 13 cm, good anterior elevation, euo/b 2.4 cm

normal bladder capacity (longitudinal diameter 13-2.4 = 10.5 cm)

good position of uv-junction **against** middle third of symphysis

normal-width 2.5 cm good-quality urethra_euo in anatomic position



	RR
preanesthesia:	130/90 mm Hg
5':	120/80
10':	120/70
postoperation:	120/70

pt 347
pt

katsina
anteriobilateral trauma; second obstetric fistula

vvf 8193
vvf

I m d (katsina)

female

33 yr

23.10.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PVIII (1 alive), \pm 2 cm 0 urethrovesicovaginal fistula with circumferential defect type **IIAb** midline/L, leaking urine for 5 mth that started immediately following cs bco obstructed last labor for 1 day, live male, married 20 yr ago pre (menarche 4 mth later), still living with husband, no menstruation, drop foot R (grade 5 against 4) and L (grade 5 against 4), no rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/pubis arch 85°, ar pos, bilateral atf/atl + pc_iloc_iscm loss, cervix fixed midline; on 12.07 not clean successful repair delivery II (b/r_kees) 17 yr ago
euo/f 2.5 cm, f/c 1 cm, ab/au 1 cm, i/v 14 cm 144.0 cm

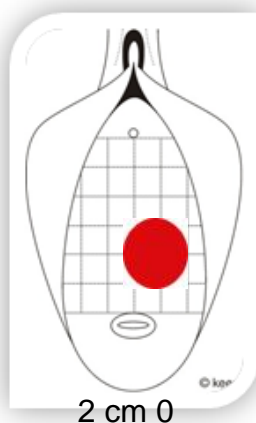
operation: ureter L, 4/5 circumferential uvvf-repair + bilateral pcf refixation

duration: 45 min

healing 95% continence 85%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

re-episiotomy, excision of mutilated avw, only L ureter identified/catheterized by metal sound, incision at fistula edge, sharp 4/5 circumferential dissection, tension-free 4/5 circumferential uvvf-repair by end-to-end vesicourethrostomy by single layer of inverting serafit, bilateral fixation of pc fascia onto paraurethra_euo atf/symphysis by 2x serafit each side, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw/avw_cervix adaptation by 2x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 11 cm, good anterior elevation, euo/b 1.3 cm normal bladder capacity (longitudinal diameter 11-1.3 = 9.5 cm)
poor position of uv-junction **fixed against** caudad third of symphysis
traumatized 1.5 cm medium-quality urethra_euo in anatomic position
poor-quality bladder tissue **real reconstructive surgery**



RR
preanesthesia: mm Hg
5':
10':
postoperation:

pt 348

katsina

vvf 8194

step-by-step identifying and then systematic reconstruction of defects

anterior trauma; european type

cath 1352

s

h a k (katsina)

female

38 yr

23.10.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PX (4 alive), intrinsic/stress incontinence grade II-III as ??healing phase long-standing atonic bladder??, leaking urine **continuously** whilst standing/walking + spontaneous miction for 3 yr which started immediately following last obstructed labor for 7 days, at home live male, married 26 yr ago pre(menarche 1 yr later), still living with husband, normal menstruation, no (h/o) drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/pubis arch 85°, ar pos avw bulging into vagina, "**open**" euo in anatomic position obesity ++++ **genuine intrinsic incontinence** not responding to bladder drill euo/bw 13 cm, poor elevation, euo/b 1.6 cm, i/v 12 cm 168.0 cm

operation: urethralization by longitudinal repair + fixation = **reconstructive surgery**

duration: 30 min (**step-by-step teaching**) healing 95% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

dye/ **not** leaking, **no** clear urine euo/c 8 cm bladder herniation thru median defect transverse curved incision at 2 cm from euo parallel/within ruga folds, sharp dissection, 6x2 cm median longitudinal fascia defect from cervix up to 2 cm to euo with bilateral retracted **thickened** fascia, longitudinal repair/rhaphy of pc fascia at 1-6 cm from euo by serafit, fixation of fascia onto paraurethra_euo atl by 1x serafit each side, now euo/b 2.5 cm, **no** urine thru euo on rest/cough/ pressure, triple fixation of foley ch 18, transverse avw_pcf/atf_avw adaptation by 2x everting seralon, hemostasis check; free urine flow, euo/bw 13 cm, good elastic anterior elevation, euo/b 2.5 cm (**urethralization**) normal bladder capacity (longitudinal diameter 13-2.5 = 10.5 cm) **no** cystocele good position uv-junction **against** middle third symphysis good fascia plate normal-width 2.5 cm urethra_euo in anatomic position good-quality pcm

RR

preanesthesia: 140/100 mm Hg

5': 140/90

10': 140/80

postoperation: 140/80

pt 349

katsina mdg

wvf 8195/8120

anterior/posterior + iatrogenic trauma; urge ++

rvf

m a g (sokoto)

female

20 yr

23.10.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PII (0 alive), total post **mutilated multiple** type **IIAa** urine intrinsic_stress incontinence grade III following repair 10.07.11, \pm 3 cm 0 proximal midline rectovaginal fistula type **1c** fixed onto sacrum, not living with husband, no menstruation since (tah), bilateral drop foot for 2 mth R (grade 4-5) and L (grade 5); normal ap diameter/pubis arch 85°, ar pos, vault fixed midline onto sacrum, operated 1x (mawch_nakaka)
a/f 10 cm, f/v 0 cm, pr/pr 2 cm, i/v 15 cm 156 cm

operation: assessment only since right from the start **heavy stool contamination**

duration: 10 min

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

episiotomy L, urine fistulas seems healed with total intrinsic_stress incontinence rvf-repair seems possible by "end-to-end" sigmoidorectostomy though **highly complicated**

however, right from the start heavy **stool contamination** thru end-stand sigmoidostomy into vagina + **no light + Sunday**

for safety reasons **no operation today** epi closure

first end-to-end sigmoidorectostomy after proper planning

second correction of urine incontinence

RR

preanesthesia: 120/70 mm Hg

5': 110/70

10': 110/70

postoperation: 110/70

pt 350

katsina mdg

vvf 8196

anterior trauma + iatrogenic

mdg vvf 021

ureter fistula + intrinsic incontinence; healed IIAa uvvf

m a s (katsina)

female

43 yr

23.10.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PXIII (8 alive), ureter fistula L, uvvf type **IIAa** midline **healed** after repair 7.6. 11, leaking urine for 9 mth which started immediately following sth-cs bco obstructed labor for 1 day, live female, married 31 yr ago pre(men arche 1 yr later), still living with husband, no menstruation since, drop foot R (grade 4-5) and L (grade 5), no rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/pubis arch 85°, ar pos, cervix fixed midline **objective** intrinsic incontinence ++ thru **open** urethra_euo euo/bw 13 cm, moderate elevation, euo/b 1.4 cm, i/v 14 cm 151.0 cm

operation: assessment

duration: 10 min

healing

continence

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

dye test/ **no** leakage but **clear urine** coming from L cervix though ureter opening not identified cervix canal only 2 cm (sth-cs)

for abdominal implantation by urologist

RR

preanesthesia: 120/80 mm Hg

5': 120/70

10': 120/70

postoperation: 120/70

pt 351

katsina

vwf 8197

congenital vagina malformation

a a b (katsina)

female

15 yr

23.10.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: P0, ba hanya since she was born, married 1 yr ago, yankan gishiri by wanzami without resulting leaking of urine, still premenarcho, no cervix visible, streak uterus on palpation, normal breast development, normal female external genitals, vagina depth only 5-6 cm; pa 85%, ar pos **sitting, 2 persons, aska, scratching (scarification)**
melanotic skin inside vagina

152.0 cm

pat + mother instructed/demonstrated repeat self-dilatation by torchlight covered by condom

for re-evaluation in 7 days

pt 352

katsina

vvf 8198

pt 353

anteriobilateral + cut-thru trauma

rvf 1038

both urine/stool continence mechanism will heal under physiologic stress

cath 1362

b a f (katsina)

female

19 yr

24.10.11

surgeon: kees waaldijk

assistant: kabir lawal

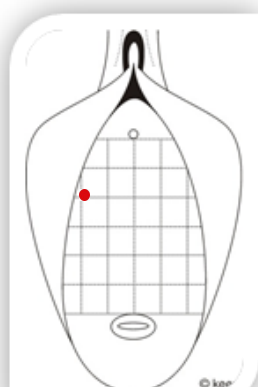
diagnosis: PIII (1 alive), ± 0.1 cm 0 urethrovesicovaginal fistula type **IIAa** at R corner (not lungu type) within 4x0.5 cm transverse avw/fascia trauma, anterior sphincter ani rupture with 0.5 cm anorectum trauma, leaking urine/flatus incontinence for 6 mth which started immediately following obstructed last labor for 1 days, in hospital sb male, married 6 yr ago post(menarche 3 mth earlier), not living with husband, no menstruation, drop foot R (grade 4-5) and L (grade 4-5), no yankan gishiri, no h/o eclampsia; normal ap diameter/**wide** pubic arch 90°, ar pos, cervix mobile, immedi suturing pp **objective** total intrinsic incontinence euo/bw 12 cm, euo/b 1.0 cm euo/f 2 cm, f/c 4 cm, a/f 0 cm, i/v 12 cm 157.0 cm

operation: fascia/uvvf-repair + anorectum/sphincter ani/perineal body repair

duration: 50 min (**teaching**) healing **both** 95% continence **both** 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

urine in accord with respiration norm euo in anat pos then minute fistula detected transverse incision thru fistula/fascia defect, sharp dissection, 0.5 cm 0 bladder_urethra defect at R, tension-free transverse fascia repair/bilateral fixation with transverse bladder/urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 1.7 cm normal bladder (long diameter 12-1.7 = 10.5 cm) poor position of uv-junction **against** caudad third symphysis norm-width 1.5 cm good-quality urethra_euo in anat pos incision at pw edge with freshening of sphincter ani ends, minimal sharp dissection, very thin friable anterior anorectum, longitudinal anorectum closure with adaptation_rhaphy of internal sphincter over 2 cm up to anocutaneous junction (with repositioning of anterior anus) by double layer of inverting interrupted/continuous serafit, inner ring of external sphincter adapted, end-to-end external sphincter ani reconstruction by 2x serafit, perineal body repair with (in)direct re-union of transversus perinei muscles and (in)direct posterior re-union of bulbocavernosus muscles by 2x serafit, perineum well adapted with anus in anatomic position, check on hemostasis



minute < 0.1 cm 0

RR
 preanesthesia: 120/80 mm Hg
 5': 120/80
 10': 120/70
 postoperation: 120/70

pt 353

katsina

rvf 1038

pt 352

anteriobilateral + cut-thru trauma

vrf 8198

both urine/stool continence mechanism will heal under physiologic stress

cath 1362

b a f (katsina)

female

19 yr

24.10.11

surgeon: kees waaldijk

assistant: kabir lawal

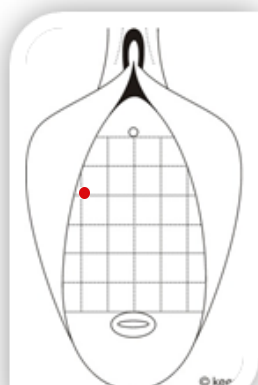
diagnosis: PIII (1 alive), ± 0.1 cm 0 urethrovesicovaginal fistula type **IIAa** at R corner (not lungu type) within 4x0.5 cm transverse avw/fascia trauma, anterior sphincter ani rupture with 0.5 cm anorectum trauma, leaking urine/flatus incontinence for 6 mth which started immediately following obstructed last labor for 1 days, in hospital sb male, married 6 yr ago post(menarche 3 mth earlier), not living with husband, no menstruation, drop foot R (grade 4-5) and L (grade 4-5), no yankan gishiri, no h/o eclampsia; normal ap diameter/**wide** pubic arch 90°, ar pos, cervix mobile, immedi suturing pp **objective** total intrinsic incontinence euo/bw 12 cm, euo/b 1.0 cm euo/f 2 cm, f/c 4 cm, a/f 0 cm, i/v 12 cm 157.0 cm

operation: fascia/uvvf-repair + anorectum/sphincter ani/perineal body repair

duration: 50 min (**teaching**) healing **both** 95% continence **both** 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

urine in accord with respiration norm euo in anat pos then minute fistula detected transverse incision thru fistula/fascia defect, sharp dissection, 0.5 cm 0 bladder_urethra defect at R, tension-free transverse fascia repair/bilateral fixation with transverse bladder/urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 1.7 cm normal bladder (long diameter 12-1.7 = 10.5 cm) poor position of uv-junction **against** caudad third symphysis norm-width 1.5 cm good-quality urethra_euo in anat pos incision at pvw edge with freshening of sphincter ani ends, minimal sharp dissection, very thin friable anterior anorectum, longitudinal anorectum closure with adaptation_rhaphy of internal sphincter over 2 cm up to anocutaneous junction (with repositioning of anterior anus) by double layer of inverting interrupted/continuous serafit, inner ring of external sphincter adapted, end-to-end external sphincter ani reconstruction by 2x serafit, perineal body repair with (in)direct re-union of transversus perinei muscles and (in)direct posterior re-union of bulbocavernosus muscles by 2x serafit, perineum well adapted with anus in anatomic position, check on hemostasis



minute < 0.1 cm 0

RR
 preanesthesia: 120/80 mm Hg
 5': 120/80
 10': 120/70
 postoperation: 120/70

pt 354
pt

katsina
total circumferential trauma
rvf healed

vvf 8199/7938
rvf 1009

n a g (katsina) female 15 yr 24.10.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PI (0 alive), total post **IIBb** urine intrinsic_stress incontinence, leaking urine whilst lying/sitting/standing/walking + **no** spontaneous miction following **early** repair 30.09.10, not living with husband, normal menstruation, drop foot R (grade 4-5) and L (grade 4-5); normal ap diameter/pubic arch 85°, ar pos, **major** bilateral atf/atl + pc_io_iloc_iscm loss (**empty pelvis**), cystocele + euo/c 6 cm **wide open** urethra_euo (straight look into bladder) posteriorly drawn inside by cervix fixed/"retracted" midline euo/bw 12 cm, poor elevation, euo/b 0 cm, i/v 12 cm 154.0 cm

operation: urethralization by longitudinal repair/bilateral fixation = **reconstr surgery**

duration: 30 min (**step-by-step teaching**) healing 85% continence 75%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

urine in accord with respiration transverse curved incision at 0.5 cm from euo, sharp dissection, 5x2 cm median pc fascia defect from cervix to 1 cm to euo, longitudinal fascia repair at 1-4 cm from euo by single layer of serafit, euo not completely normalized, to neutralize traction by fixed cervix bilateral fascia fixation onto para_euo atf/symphysis by 1x serafit each side with repositioning/stabilizing/securing urethra_euo, euo/b 2.0 cm, **no** urine thru euo on rest/ cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/b 12 cm, good anterior elevation, euo/b 2.0 cm (**urethralization**) **no** cystocele normal bladder capacity (longitudinal diameter 12-2.0 = 10 cm) acceptable position uv-junction **against** middle/caudad third symphysis good fascia plate poor-quality pc musculature "normal-width" 2 cm poor-quality urethra_euo in anatomic position **operation fine** but the **problem: poor-quality tissue + pull/traction by fixed cervix**

RR
preanesthesia: 120/70 mm Hg
5': 120/70
10': 120/70
postoperation: 120/70

pt 355

katsina

mdg 098

vvf 8015/7948

anterior trauma + severe iatrogenic mutilation; triple trauma

r b m city (katsina)

female

40 yr

24.10.11

surgeon: dr halliru idris

assistant: gambo lawal

diagnosis: PXIV (6 alive), residual \pm 0.2 cm 0 vesicovaginal fistula midline following multiple repairs 23.10.10 to 5.2.11, still living with husband, no menstruation; normal AP diameter/wide pubic arch 90°, AR pos cervix fixed/retracted midline

open urethra_euo with **objective** intrinsic_stress incontinence
euo/f 4 cm, f/c 0 cm, i/v 12 cm obesity + 160.0 cm

operation: vvf-“repair”

duration: 45 min

healing 80% continence 70%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

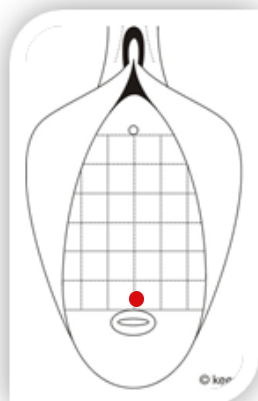
transverse incision thru fistula, sharp dissection, tension-free transverse **mutilated poor-quality** bladder closure by single layer of inverting serafit, still urine + thru euo on cough, foley ch 18, transverse avw/posterior cervix adaptation by 3x everting seralon for hemostasis, check on hemostasis; good free urine flow, euo/bw 11 cm, good anterior elevation, euo/b 2.8 cm

moderate bladder capacity (longitudinal diameter 11-2.8 = 8.5 cm)

good position of uv-junction **fixed against** middle third of symphysis

normal-width 3 cm medium-quality urethra_euo in anatomic position

the **problem**: **severe obstetric trauma + iatrogenic mutilation**



0.2 cm 0

	RR
preanesthesia:	140/100 mm Hg
5':	140/80
10':	130/80
postoperation:	130/80

anterior trauma; nb postpoliomyelitis syndrome R leg

a i z (katsina)

female

28 yr

24.10.11

surgeon: dr halliru idris

assistant: gambo lawal

diagnosis: PIX (0 alive), residual 0.2 cm 0 urethrovesicovaginal at L following repair 1.6.11 still living with husband, normal menstruation, drop foot R (grade) and L (grade), no rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/pubis arch 85°, ar pos, cervix fixed midline
euo/f 3 cm, f/c 3 cm, i/v 12 cm 123?? cm

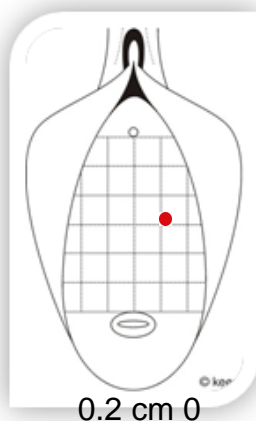
operation: uvvf-repair

duration: 40 min

healing 85% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision thru/at fistula edge, sharp dissection, tension-free transverse bladder/urethra closure by single layer of inverting serafit. **no** urine thru suture line/euo on rest/cough/pressure, foley ch 18, transverse avw adaptation by 2x everting seralon, hemostasis check; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 2.4 cm normal bladder capacity (longitudinal diameter 12-2.4 = 9.5 cm)
good position of uv-junction **against** middle third of symphysis
normal-width 2.5 cm good-quality urethra_euo in anatomic position
complicated bco postpoliomyelitis syndrome



RR
preanesthesia: 120/70 mm Hg
5': 110/70
10': 100/70
postoperation: 100/70

pt 357

katsina mdg
anterior trauma

vvf 100/037

n z u m (rèp niger)

female

24 yr

24.10.11

surgeon: dr halliru idris

assistant: gambo lawal

diagnosis: PVI (1 alive), **open** urethra_euo pulled posteriorly inside following repair 11.6.11, not living with husband, normal menstruation, bilateral drop foot for 2 mth R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/pubis arch 85°, ar pos, cervix mobile, operated 1x (da magaram) **total intrinsic incontinence grade III**
euo/c 5 cm, i/v 11 cm 148.0 cm

operation: urethra reconstruction

duration: 40 min

healing 85% continence 85%

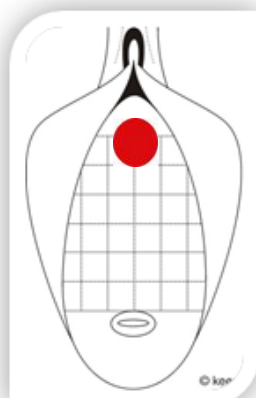
anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

urethra reconstruction over 2 cm, **no** urine thru suture line/euo on rest/cough/pressure, foley ch 18, check on hemostasis; free urine flow, euo/bw 11 cm, good anterior elevation, euo/b 2.6 cm

normal bladder capacity (longitudinal diameter 11-2.6 = 8.5 cm)

good position of uv-junction **against** middle third of symphysis

normal-width 2.6 cm medium-quality urethra_euo in anatomic position



RR
preanesthesia: 130/80 mm Hg
5': 120/70
10': 120/70
postoperation: 120/70

f m g (katsina) female 31 yr 25.10.11

surgeon: dr halliru idris

assistant: gambo lawal

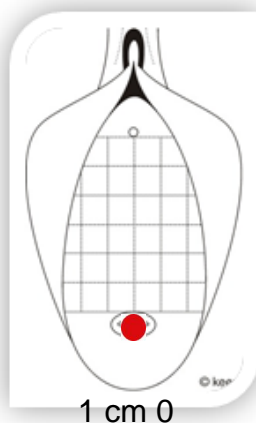
diagnosis: PX (2 alive), intracervical \pm 1 cm 0 cs-vesicocervicovaginal fistula type I, leaking urine for 4 mth which started immediately following cs bco last obstructed labor for 2 days, sb male, married 17 yr ago post(menarche 1 yr earlier), still living with husband, no menstruation, drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no eclampsia; normal ap diame ter/pubic arch 85° , ar pos, cervix fixed midline
euo/f 7 cm, f/c 0 cm, i/v cm 156.0 cm

operation: cs-vcvf-repair

duration: 40 min healing 95% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

incision at fistula edge, sharp dissection, tension-free transverse bladder closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, foley ch 18, transverse avw/cervix adaptation by 2x everting seralon, check on hemo stasis; free urine flow, euo/bw 10 cm, good anterior elevation, euo/b 2 cm normal bladder capacity (longitudinal diameter 10-2 = 8 cm) acceptable position of uv-junction **against** middle/caudad third of symphysis normal-width 2 cm good-quality urethra_euo in anatomic position



RR
preanesthesia: 140/70 mm Hg
5': 120/70
10': 120/70
postoperation: 120/70

pt 360

katsina mdg
iatrogenic trauma

vvf 103

s a k city

female

30 yr

25.10.11

surgeon: dr halliru idris

assistant: gambo lawal

diagnosis: PVIII (7 alive), ureter fistula type **III**, leaking urine for 3 mth which started immediately following cs bco obstructed last labor for 1 days, live female, married 17 yr ago pre(menarche 5 mth later), still living with husband, no menstruation, drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no eclampsia; normal ap diameter/pubis arch 85°, ar pos, cervix fixed midline
euo/f cm, f/c cm, i/v cm

155.0 cm

operation: assessment

duration: 10 min

healing

continence

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

dye/ **no** leakage but **clear** urine in vagina

refer to urologist for abdominal implantation

RR

preanesthesia: 150/100 mm Hg

5': 140/90

10': 130/80

postoperation: 130/80

pt 361

kano

vvf 4685

anteriobilateral trauma

m u d (kano)

female

15 yr

25.10.11

surgeon: kees waaldijk

assistant: aisha shehu

diagnosis: PI (0 alive), \pm 1 cm 0 urethrovesicovaginal fistula type **IIAa** midline within 5x1.5 cm transverse pcf defect, leaking urine for 6 mth which started immediately following obstructed labor for 1 day, in hospital dandume sb male, married 2 yr ago post(menarche 1 mth earlier), not living with husband, normal menstruation, drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/pubis arch 85°, ar pos, cervix mobile obesity ++ **objective stress ++**
 euo/f 2.5 cm, f/c 4 cm, i/v 14 cm 145 cm

operation: transverse fascia /bilateral fixation + uvvf-repair

duration: 40 min (**step-by-step teaching**) healing 95% continence 95%

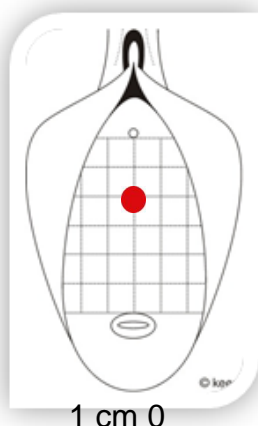
anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

small episiotomy L, transverse incision thru/at fistula edge/pcf defect, sharp dissection, tension-free transverse fascia repair/bilateral fixation with transverse bladder/urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 1.6 cm

normal bladder capacity (longitudinal diameter 12-1.6 = 10.5)

poor position of uv-junction **against** caudad third of symphysis

normal-width 1.5 cm good-quality urethra_euo in anatomic position



RR
 preanesthesia: 130/80 mm Hg
 5': 130/80
 10': 130/80
 postoperation: 120/70

pt 362

kano

vvf 4686

anteriobilateral + posteriolateral R trauma

m a k (kano city)

female

44 yr

25.10.11

surgeon: kees waaldijk

assistant: aisha shehu

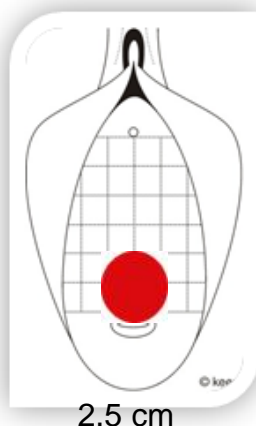
diagnosis: PVIII (4 alive), \pm 2.5 cm 0 vesico" cervico" vaginal fistula type **IIIAa** with bladder base prolapse, leaking urine for 4 mth which started immediately following obstructed labor for 3 days, in hospital bichi sb male, married 30 yr ago post(menarche 1 yr earlier), still living with husband, no menstruation, drop foot R (grade 4) and L (grade 5), no rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/pubis arch 85°, ar pos, cervix "fixed", transverse 5x1 cm pcf defect at 3 cm from euo, iscm_ssl_pm trauma R euo/f 5 cm, f/c 0 cm, i/v 12 cm obesity ++ 163 cm

operation: bilateral ureter catheterization + vcvf-repair

duration: 40 min (**step-by-step teaching**) healing 95% continence 85%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

small episiotomy L, bilateral ureter catheterization for 20 cm, incision at fistula edge, sharp dissection, tension-free transverse bladder/bladder_cervix closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw/cervix adaptation by 2x everting seralon, hemostasis check, skin closure; free urine flow, euo/bw 13 cm, good anterior elevation, euo/b 2.2 cm normal bladder capacity (longitudinal diameter 13-2.2 = 11 cm) good position of uv-junction **against** middle third of symphysis normal-width 2 cm good-quality urethra_euo in anatomic position



	RR
preanesthesia:	160/100 mm Hg
5':	150/100
10':	140/90
postoperation:	130/80

pt 363

kano

vvf 4687

anterior + iatrogenic surgical trauma; that specific fistula

h a w (plateau)

female

20 yr

25.10.11

surgeon: kees waaldijk

assistant: aisha shehu

diagnosis: PII (0 alive), **mutilated** ± 2 cm 0 urethrovesicovaginal fistula type **IIAa**, leaking urine for 3 yr which started immediately following cs bco last obstructed labor for 3 days, sb male, married 7 yr ago pre(menarche 1 mth later), not living with husband, normal menstruation, drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no eclampsia; normal ap dia meter/pubis arch 85°, ar pos, cervix retracted/fixed, operated 2x euo/f 2 cm, f/c 3 cm, i/v 12 cm obesity ++ 161 cm

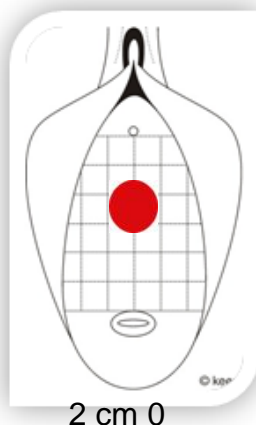
operation: uvvf-repair

duration: 40 min

healing 75% continence 70%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

small episiotomy, transverse incision thru/at fistula edge, sharp dissection, excision of scar tissue +, **under tension** transverse bladder/urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 2.2 cm normal bladder capacity (longitudinal diameter 12-2.2 = 10 cm) good position of uv-junction **against** middle third of symphysis since open 2 cm medium-quality urethra_euo drawn inside by **traction by fixed cervix**



RR
 preanesthesia: 130/70 mm Hg
 5': 120/70
 10': 120/70
 postoperation: 120/70

r a d (katsina city)

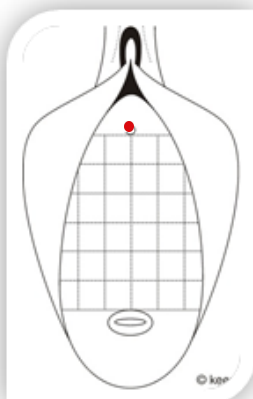
female

16 yr

26.10.11

diagnosis: PI (alive), dysuria + ?overflow incontinence?, **leaking/difficulty in passing urine for 55 days** which started immediately following obstructed labor for 1 day, in hospital live female, married 1 yr ago post(menarche 2 yr earlier), not living with husband, no menstruation, no drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no eclampsia; normal ap diameter/**wide** pubic arch 90°, ar pos 146.0 cm
pin-hole euo with total urethra vesicalization

26.10.11 urethrocystocele up to pin-hole euo; avw bulging into vagina
under spinal anesthesia
gentle gradual dilatation from H1 thru H8, foley ch 18; free urine flow, euo/bw 12 cm, moderate anterior elevation after bladder draining and euo/b 0 cm (like predicted)
normal bladder capacity (longitudinal diameter 12-0 = 12 cm)
poor position of uv-junction **against** caudad third symphysis
normal-width 0 cm ??–quality urethra_euo in anatomic position
is it **atonic bladder** with non-scarred euo “stenosis” or non-scarred euo “stenosis” with resulting total vesicalization of urethra
treat like atonic bladder for re-evaluation after catheter/bladder drill



pin-hole euo

pt 365
pt

katsina

vvf 8200
pro 71

**normal-width 1.6 cm urethra in anat pos
delivered 5x vaginally after repair
pubocervical fascia totally deficient/torn out medially**

m h m (katsina)

female

36 yr

26.10.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PX (6 alive), extensive cystocele far out of vulva/cervix ok, something coming out for 9 mth which started immediately following obstructed last labor for < 1 day, in hospital live male **twins**, married 23 yr ago post(men arche 1 mth earlier), still living with husband, normal menstruation, no (h/o) drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no eclampsia; normal ap diameter/**wide** pubic arch 95°, ar pos, cervix 1° pro, never leaking urine euo/c 6 cm normal urethra_euo in anat pos euo/bw 15 cm, poor elevation, euo/b 1.6 cm, i/v 12 cm 165.0 cm

operation: urethralization by longitudinal fascia repair/bilateral fixation

duration: 30 min (**step-by-step teaching**) healing 95% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

removal cervix fixation suture, transverse incision at 2 cm from euo thru repair scar, sharp dissection, median fascia 5x2 cm defect from cervix up to 2 cm to euo, tension-free longitudinal fascia repair at 2-6 cm from euo by single layer of serafit, euo/bw 2.7, **no** urine thru euo on rest/cough/pressure, since fixation not optimal bilateral fixation of pc fascia to paraurethra_euo symphysis/atf by 1x serafit each side, triple fixation foley ch 18, transverse avw adaptation by 2x everting seralon, hemostasis check; free urine flow, euo/b 15 cm, good anterior elevation, euo/b 2.7 cm (**urethralization**) normal bladder capacity (longitudinal diameter 15-2.7 = 12.5 cm) good position uv-junction **against** middle third symphysis good fascia plate good pc musculature normal-width 2.5 cm good-quality urethra_euo in anatomic position

RR

preanesthesia: 200/120 mm Hg

5': 180/100

10': 160/90

postoperation: 140/90

anteriolateroposterior trauma R

m k k s (katsina city)

female

17 yr

26.10.11

surgeon: kees waaldijk

assistant: kabir lawal

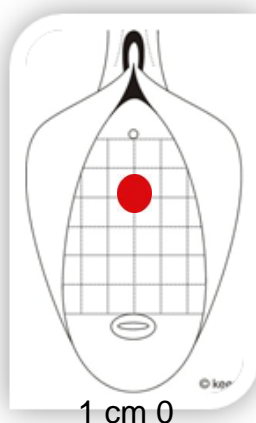
diagnosis: PI (0 alive), \pm 1 cm 0 urethrovesicovaginal fistula type **IIAa/Ab** with **b characteristics** at R, **leaking urine for 46 days** which started immediately following obstructed labor for 3 days, in hospital sb male, married 3 yr ago post(menarche 6 mth earlier), not living with husband, no menstruation, drop foot R (grade 5) and L (grade 4), no rvf, yankan gishiri, eclampsia no; normal ap diameter/**wide** pubic arch 90°, ar pos, major atf/atl + pc_iloc_iscm loss only at R (paraurethra intact), cervix fixed towards i spine R, ssl_pm trauma at R
euo/f 2 cm, f/c 4 cm, ab/au xx cm, i/v 12 cm 144.5 cm

operation: transverse fascia repair/(re)fixation with uvvf-repair

duration: 40 min (**step-by-step teaching**) healing 95% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

small re-episiotomy L, transverse/curved incision thru/at fistula edge, sharp dissection, tension-free transverse fascia repair/bilateral (re)fixation onto paraurethra_euo atf with transverse bladder/urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw ad aptation by 2x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 2.3 cm
normal bladder capacity (longitudinal diameter 12.2.3 = 9.5 cm)
good position of uv-junction **fixed against** middle third of symphysis
normal-width 2.5 cm good-quality urethra_euo in anatomic position



RR
preanesthesia: 120/80 mm Hg
5': 120/80
10': 120/70
postoperation: 120/70

pt 367

katsina mdg

vvf 8202/8071

anteriolateral R trauma: second obstetric fistula; why did it not heal

h a d (katsina)

female

28 yr

26.10.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PVI (0 alive), residual 0.1 cm urethrovesicovaginal fistula at R type **IIAa** with 1 cm long fistulous tract following repair 1.5.11, not with husband, normal menstruation; normal ap diameter/pubis arch 85°, ar pos, cervix mobile, **successful** vvf-repair delivery II, atf/atl + pc_ilcm loss at R euo/f 1.5 cm, f/c 4 cm, i/v 11 cm **no** longer cystocele 156.0 cm

operation: uvvf-repair

duration: 15 min

healing 95% continence 90%

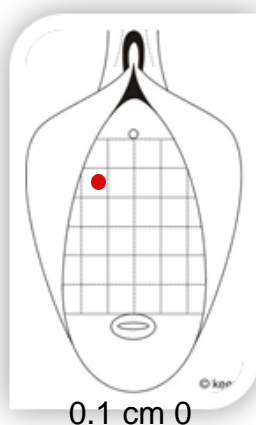
anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse curved incision thru fistula, sharp dissection, excision of whole fistulous tract, tension-free transverse closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18 with transverse avw adaptation, check on hemostasis; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 2.0 cm

normal bladder capacity (longitudinal diameter 12-2.0 = 10 cm)

acceptable position of uv-junction **against** middle/caudad third of symphysis

normal-width 1.5 cm good-quality urethra_euo in anatomic position



RR
 preanesthesia: 130/80 mm Hg
 5': 120/70
 10': 120/70
 postoperation: 120/70

pt 368	katsina	vvf 8203
pt	second obstetric leakage	vvf
	dankama	
b a k m (katsina city)	female	42 yr
		26.10.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PX (4 alive), 2.5x2x2 cm smooth-surface bladder stone with urge incontinence, leaking urine + spontaneous miction for 1 yr which started immediately following cs bco obstructed last labor for 1 day, live female, married 30 yr ago pre(menarche 1 yr later), still living with husband, normal menstruation, no drop foot R (grade 5) and L (grade 5), no rvf, yankan gishiri no, no eclampsia; normal ap diameter/pubic arch 85°, ar pos, cervix fixed, successful vvf-repair delivery I (b/r_kees) 27 yr ago obesity ++
 euo/s 3 cm, f/c cm, i/v 12 cm 155.0 cm

operation: stone removal + avw closure

duration: 25 min healing 75% continence 85%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

gradual urethra dilatation from h5 thru H 14, on probing stone too big to be removed transurethrally, transverse bladder opening by transverse incision thru repair scar, stone (?fixed to R cervix?) removed in pieces, flushing debris out of bladder, transverse avw adaptation by 3x everting seralon (with inverted bladder adaptation), ballooning of foley ch 18, on flushing no leakage, check on hemostasis; free urine flow, euo/bw 12 cm, moderate anterior elevation, euo/b 2.1 cm
 normal bladder capacity (longitudinal diameter 12-2.1 = 10 cm)
 acceptable position of uv-junction **against** middle/caudad third of symphysis
 normal-width 2 cm medium-quality urethra_euo in anatomic position
 stone due to ?cs suture? since small fistula excluded during flushing

	RR
preanesthesia:	170/110 mm Hg
5':	150/100
10':	150/90
postoperation:	140/90

pt 369

katsina

vvf 8204/1970/..7472

last resort; excessive scarring

h u b (kano)

female

39 yr

26.10.11

surgeon: dr kabiru abubakar/kees waaldijk

assistant: jamila habibu

diagnosis: PI (0 alive), now 4 cm 0 **“inoperable”** urethrovesicovaginal fistula **IIAb** following bladder stone removal 9.6.11; normal AP diameter/small pubic arch 60°, AR pos, major pc_ilc_ iscm loss cystostomy + stone removal 15/8-07 (b/r-acquire)
euo/f 1.5 cm, f”c” 0 cm, i(v 8 cm 151.0 cm

operation: **ps-like** uvvf-repair

last resort final

duration: 25 min

healing 85% continence 20%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

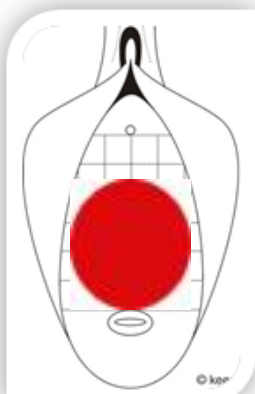
incision around fistula edge, **no** dissection, **ps-like** avw “closure” by 5x everting seral on, foley ch 18, check on hemostasis; free urine flow, euo/bw 10 cm, good anterior elevation, euo/b 1.5 cm

normal bladder capacity (longitudinal diameter 10-1.5 = 8.5 cm)

poor position UV-junction **fixed against** caudad third symphysis

normal-width 1.5 cm medium-quality urethra_euo in anatomic position

the **problem: excessive scar tissue**



“inoperable” 4 cm 0

RR
preanesthesia: 130/80 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

pt 370

katsina

vvf 8205

pt 371

anteriobilateral + forceps posterior + infection

rvf 1039

k b m c (borno)

female

19 yr

27.10.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PI (0 alive), **“inoperable”** ± 4 cm 0 urethrovesicovaginal fistula type **IIAb** with circumferential defect/major bladder loss, sphincter ani rupture with 2 cm long anorectum trauma, leaking urine/stool_flatus incontinence for 4 yr which started immediately after cs after failed forceps bco obstructed labor for 4 days, (in hosp 3 days) sb male, married 7 yr ago pre(menarche 1 yr later), not living at husband, normal menstruation, bilateral foot drop for 3 mth R (grade 5) and L (grade 5), no yankan gishiri, eclampsia no h/o; normal ap diameter/pubis arch 85°, ar pos, bilateral atf/atl + pc_iloc_iscm loss, cervix fixed, s/o **fournier gangrene** L posterior vulva with labia loss + **real anal sphincter tissue loss from 11-3 o'clock** euo/f 2 cm, f/c 0 cm, ab/au 2 cm, a/f 0 cm, i/v 12 cm 152.0 cm

operation: **ps-like** uvvf-repair + anorectum/sphincter ani/perineal body repair

duration: 50 min (**step-by-step teaching**) healing u_s **60_85%** continence **75_95%**

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

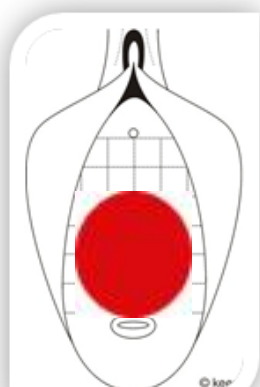
since everything fixed incision at fistula edge, **no** dissection, **ps-like** cervix/avw adaptation by 5x everting seralon, triple fixation of foley ch 18; free urine flow, euo/bw 6 cm, good anterior elevation, euo/b 2.5 cm

small bladder capacity (longitudinal diameter 6-2.5 = 3.5 cm)

good position of uv-junction **fixed against** middle third of symphysis

normal-width 2.5 cm good-quality urethra_euo in anatomic position

incision at pwv edge with freshening of sphincter ani ends, minimal sharp dissection, longitudinal anorectum closure with adaptation_rhaphy of internal sphincter over 2.5 cm up to anocutaneous junction (with repositioning of anterior anus) by double layer of inverting interrupted/continuous serafit, inner ring of external sphincter adapted, end-to-end external sphincter ani reconstruction by 2x serafit, perineal body repair with (in)direct re-union of transversus perinei muscles and (in)direct posterior re-union of bulbocavernosus muscles by 2x serafit, perineum well adapted with anus in anatomic position, check on hemostasis



“inoperable” 4 cm 0

RR

preanesthesia: 130/90 mm Hg

5': 130/80

10': 130/80

postoperation: 130/80

pt 371
pt 370

katsina

vvf 8205
rvf 1039

anteriobilateral + forceps posterior + infection

k b m c (borno)

female

19 yr

27.10.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PI (0 alive), **“inoperable”** ± 4 cm 0 urethrovesicovaginal fistula type **IIAb** with circumferential defect/major bladder loss, sphincter ani rupture with 2 cm long anorectum trauma, leaking urine/stool/flatus incontinence for 4 yr which started immediately after cs after failed forceps bco obstructed labor for 4 days, (in hosp 3 days) sb male, married 7 yr ago pre(menarche 1 yr later), not living at husband, normal menstruation, bilateral foot drop for 3 mth R (grade 5) and L (grade 5), no yankan gishiri, eclampsia no h/o; normal ap diameter/pubis arch 85°, ar pos, bilateral atf/atl + pc_iloc_iscm loss, cervix fixed, s/o **fournier gangrene** L posterior vulva with labia loss + **real anal sphincter tissue loss from 11-3 o'clock** euo/f 2 cm, f/c 0 cm, ab/au 2 cm, a/f 0 cm, i/v 12 cm 152.0 cm

operation: **ps-like** uvvf-repair + anorectum/sphincter ani/perineal body repair

duration: 50 min (**step-by-step teaching**) healing u_s **60_85%** continence **75_95%**

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

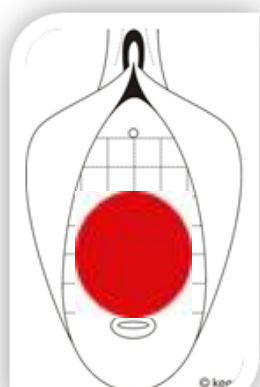
since everything fixed incision at fistula edge, **no** dissection, **ps-like** cervix/avw adaptation by 5x everting seralon, triple fixation of foley ch 18; free urine flow, euo/bw 6 cm, good anterior elevation, euo/b 2.5 cm

small bladder capacity (longitudinal diameter 6-2.5 = 3.5 cm)

good position of uv-junction **fixed against** middle third of symphysis

normal-width 2.5 cm good-quality urethra_euo in anatomic position

incision at pwv edge with freshening of sphincter ani ends, minimal sharp dissection, longitudinal anorectum closure with adaptation_rhaphy of internal sphincter over 2.5 cm up to anocutaneous junction (with repositioning of anterior anus) by double layer of inverting interrupted/continuous serafit, inner ring of external sphincter adapted, end-to-end external sphincter ani reconstruction by 2x serafit, perineal body repair with (in)direct re-union of transversus perinei muscles and (in)direct posterior re-union of bulbocavernosus muscles by 2x serafit, perineum well adapted with anus in anatomic position, check on hemostasis



“inoperable” 4 cm 0

RR
preanesthesia: 130/90 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

I a k (niger state)

female

19 yr

27.10.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PII (all alive), residual sphincter ani rupture with 1.5 cm longitudinal ano rectum trauma type **IIb** with ano rectum prolapse following repair 4.6.11, stool_flatus incontinence, still living with husband, normal menstruation, no (h/o) drop foot R (grade 5) and L (grade 5), no vvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/**wide** pubic arch 95°, ar pos, operated 3x (2x zurmi + 1x b/r_acquire) **no longer mutilation**
a/f 0 cm, i/v 12 cm never leaking urine 146.0 cm

operation: ano rectum closure and sphincter ani_perineal body reconstruction

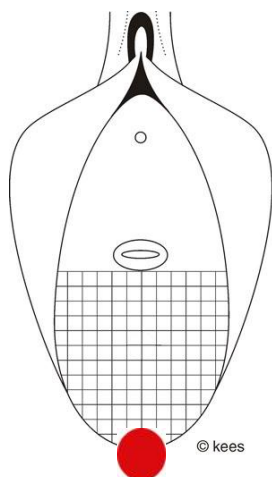
duration: 30 min (**step-by-step teaching**) healing 85% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision at pvw edge, minimal dissection with freshening of sphincter ani ends, longitudinal ano rectum closure with adaptation_rhaphy of internal sphincter over 2 cm up to anocutaneous junction (with repositioning of anterior anus) by double layer of inverting interrupted/continuous serafit, inner ring of external sphincter adapted, end-to-end external sphincter ani reconstruction by 2x serafit, perineal body repair with (in)direct re-union of transversus perinei muscles and (in)direct posterior re-union of bulbocavernosus muscles by 3x serafit, perineum well adapted with anus in anatomic position, check on hemostasis

it looks normal now: **no longer ano rectum mucosa prolapse**

foley ch 18; free urine flow, euo/bw 13 cm, good elevation, euo/b 2 cm



RR
preanesthesia: 130/80 mm Hg
5': 120/70
10': 120/70
postoperation: 120/70

pt 373
pt

katsina
second obstetric fistula

vvf 8206
vvf

r a y (katsina)

female

30 yr

27.10.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PV (0 alive), \pm 0.2 cm 0 urethrovesicovaginal fistula L with circumferential defect type **II Bb**, two smooth-surface 2x1x1 cm and 3x2x2 cm bladder stones, leaking urine for 2 yr which started immediately following last obstructed labor for 2 days, at home sb male, married 18 yr ago pre(menarche 1 yr later), not living with husband, normal menstruation, no drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/pubis arch 85°, ar pos, bilateral atf/atl + pc_iloc_iscm loss, cervix mobile, successful repair delivery I (b/r_kees) obesity ++
euo/f 1 cm, f/c 2.5 cm, ab/au xx cm, i/v 12 cm 148.0 cm

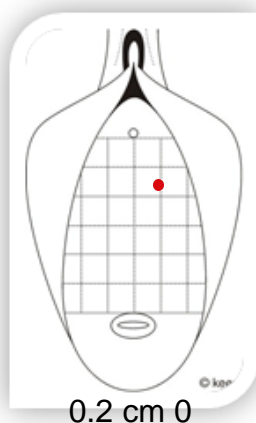
operation: stone removal + uvvf-repair + bilateral pcf refixation

duration: 20 min

healing 85% continence 85%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

large transverse incision thru fistula/repair scar, sharp dissection, transverse further bladder opening, removal of both stones in one piece, transverse fascia repair/bilateral refixation onto paraurethra_euo atf with transverse bladder closure single layer of inverting serafit with repositioning of euo, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation foley ch 18, transverse avw adaptation by 2x everting seralon, hemo stasis check; free urine flow, euo/bw 10 cm, good anterior elevation, euo/b 1.6 cm normal bladder capacity (longitudinal diameter 10-1.6 = 8.5 cm)
poor position of uv-junction **fixed against** caudad third of symphysis
normal-width 1.5 cm poor-quality urethra_euo in anatomic position



RR
preanesthesia: 130/80 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

h m m (katsina) female 21 yr 27.10.11

surgeon: dr halliru idris

assistant: gambo lawal

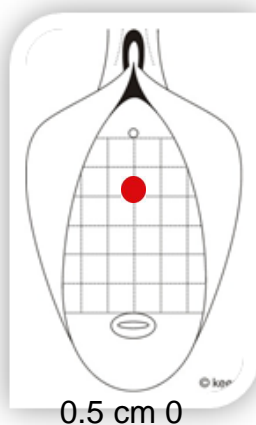
diagnosis: PIII (2 alive), \pm 0.5 cm 0 urethrovesicovaginal fistula type **IIAa** at midline, **leaking urine for 63 days** which started immediately following obstructed last labor for 1 day, in hospital live male, married 5 yr ago post(menarche 3 yr earlier), not living with husband, no menstruation, drop foot R (grade 4) and L (grade 4), no rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/pubis arch 85°, ar pos, cervix mobile
euo/f 2 cm, f/c 4 cm, i/v cm 148.0 cm

operation: uvvf-repair

duration: 30 min healing 95% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision thru/at fistula edge, sharp dissection, tension-free transverse bladder/urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, foley ch 18, transverse avw adaptation by 2x everting seralon, hemostasis check; free urine flow, euo/bw 16 cm, good anterior elevation, euo/b 2.5 cm normal bladder capacity (longitudinal diameter 16-2.5 = 13.5 cm)
good position of uv-junction **against** middle third of symphysis
normal-width 2.5 cm good-quality urethra_euo in anatomic position



RR
preanesthesia: 130/90 mm Hg
5': 120/70
10': 120/70
postoperation: 110/70

pt 375

katsina
total circumferential trauma

vvf 105
cath 1372
rvf

a a m g (katsina)

female

17 yr

27.10.11

surgeon: dr kabiru abubakar

assistant: gambo lawal

diagnosis: PI (0 alive), \pm 3 cm 0 urethrovesicovaginal fistula type **IIAb** with circumferential defect, leaking urine for 3 mth which started immediately following cs bco obstructed labor for 2 days, sb male, married 3 yr ago post (menarche 6 mth earlier), not living with husband, no menstruation, drop foot R (grade 4) and L (grade 4), **healed** proximal pwv, no rvf, no yankan gishiri, no eclampsia; normal ap diameter/pubis arch 85°, ar pos, **no** stool/flatus incontinence, cervix fixed
euo/f 1.5 cm, ab/au 1.5 cm, f/c 1.5 cm 146.0 cm

operation: circumferential uvvf-repair + bilateral pcf refixation

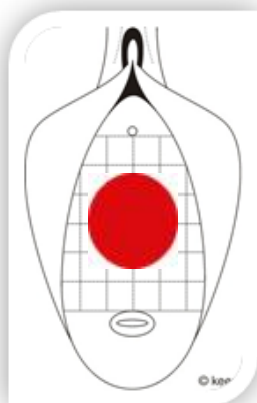
duration: 50 min

healing

continence

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

episiotomy L, incision at fistula edge, sharp circumferential dissection, advancement/caudad fixation of anterior bladder onto symphysis/urethra, tension-free circumferential uvvf-repair by end-to-end vesicourethrostomy by single layer of inverting serafit, bilateral fixation of pc fascia onto paraurethra_euo atf/symphysis by 2x serafit each side, **no** urine thru suture line/euo on rest/cough/pressure, foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 11 cm, good anterior elevation, euo/b 1.5 cm
normal bladder capacity (longitudinal diameter 11-1.5 = 9.5 cm)
poor position of uv-junction **fixed against** caudad third of symphysis
normal-width 1.5 cm medium-quality urethra_euo in anatomic position



3 cm 0

RR
preanesthesia: 120/70 mm Hg
5': 120/70
10': 110/70
postoperation: 110/70

pt 377
pt 378

katsina
anteriobilateral + cut-thru trauma

vvf 8207
rvf 1041

a s r (katsina)

female

18 yr

28.10.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PIII (0 alive), \pm 2 cm 0 urethrovesicovaginal fistula type **IIAb** with circumferential defect within "healed" 6x2 cm transverse avw/pcf defect, **mutilated sphincter ani rupture** with 1.5 cm long anorectum trauma, **leaking urine/stool/flatus incontinence for 43 days** which started immediately following obstructed labor for 3 days, at home sb male, married 5 yr ago post(menarche 1 mth earlier), not living with husband, no menstruation, drop foot R (grade 4-5) and L (grade 4-5), no yankan gishiri, eclampsia no; normal ap diameter/**wide** pubic arch 90°, ar pos, bilateral atf/atl + pc_ ilc_iscm loss, cervix mobile perineal suturing 1x
euo/f 1.5 cm, f/c 4 cm, ab/au 1 cm, i/v 12 cm 146.5 cm

operation: circumferential uvvf-repair + bilateral pcf refixation

duration: 50 min (**teaching**) healing **both** 95% continence **both** 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

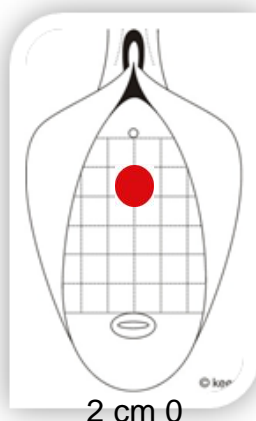
transverse incision thru fistula, sharp circumferential dissection, advancement/caudad fixation of anterior bladder onto symphysis/urethra, tension-free circumferential uvvf-repair by end-to-end vesicourethrostomy by single layer of inverting serafit, bilateral fixation of pc fascia onto paraurethra_euo atf/symphysis by 2x serafit each side, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 1.3 cm

normal bladder capacity (longitudinal diameter 12-1.3 = 10.5 cm)

poor position of uv-junction **fixed against** caudad third of symphysis

normal-width 1.5 cm good-quality urethra_euo in anatomic position

incision at pw edge with freshening of sphincter ani ends, minimal sharp dissection, longitudinal anorectum closure with adaptation_rhaphy of internal sphincter over 2 cm up to anocutaneous junction (with repositioning of anterior anus) by double layer of inverting interrupted/continuous serafit, inner ring of external sphincter adapted, end-to-end sphincter ani reconstruction by 2x serafit, perineal body repair with (in)direct re-union of transversus perinei muscles and (in)direct posterior re-union of bulbocavernosus muscles by 2x serafit, perineum well adapted with anus in anatomic position, check on hemostasis **anterior sphincter ani loss due to operation**



RR
preanesthesia: 120/80 mm Hg
5': 120/70
10': 120/70
postoperation: 100/70

pt 378
pt 377

katsina
anteriobilateral + cut-thru trauma

rvf 1041
vfv 8207

a s r (katsina)

female

18 yr

28.10.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PIII (0 alive), \pm 2 cm 0 urethrovesicovaginal fistula type **IIAb** with circumferential defect within "healed" 6x2 cm transverse avw/pcf defect, **mutilated sphincter ani rupture** with 1.5 cm long anorectum trauma, **leaking urine/stool/flatus incontinence for 43 days** which started immediately following obstructed labor for 3 days, at home sb male, married 5 yr ago post(menarche 1 mth earlier), not living with husband, no menstruation, drop foot R (grade 4-5) and L (grade 4-5), no yankan gishiri, eclampsia no; normal ap diameter/**wide** pubic arch 90°, ar pos, bilateral atf/atl + pc_ ilc_iscm loss, cervix mobile, perineal suturing 1x
euo/f 1.5 cm, f/c 4 cm, ab/au 1 cm, i/v 12 cm 146.5 cm

operation: circumferential uvvf-repair + bilateral pcf re-fixation

duration: 50 min (**teaching**) healing **both** 95% continence **both** 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

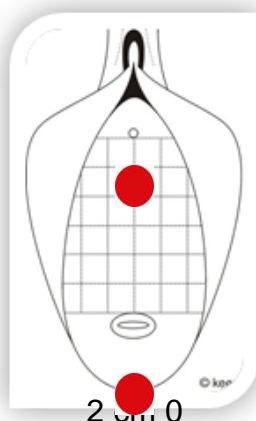
transverse incision thru fistula, sharp circumferential dissection, advancement/caudad fixation of anterior bladder onto symphysis/urethra, tension-free circumferential uvvf-repair by end-to-end vesicourethrostomy by single layer of inverting serafit, bilateral fixation of pc fascia onto paraurethra_euo atf/symphysis by 2x serafit each side, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw adaptation by 2x everting seralon; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 1.3 cm

normal bladder capacity (longitudinal diameter 12-1.3 = 10.5 cm)

poor position of uv-junction **fixed against** caudad third of symphysis

normal-width 1.5 cm good-quality urethra_euo in anatomic position

incision at pw edge with freshening of sphincter ani ends, minimal sharp dissection, longitudinal anorectum closure with adaptation_rhaphy of internal sphincter over 2 cm up to anocutaneous junction (with repositioning of anterior anus) by double layer of inverting interrupted/continuous serafit, inner ring of external sphincter adapted, end-to-end sphincter ani reconstruction by 2x serafit, perineal body repair with (in)direct re-union of transversus perinei muscles and (in)direct posterior re-union of bulbocavernosus muscles by 2x serafit, perineum well adapted with anus in anatomic position, check on hemostasis **anterior sphincter ani loss due to operation**



RR
preanesthesia: 120/80 mm Hg
5': 120/70
10': 120/70
postoperation: 100/70

pt 379

katsina
anteriobilateral trauma

vvf 107

b r j-k (katsina)

female

17 yr

28.10.11

surgeon: dr kabiru abubakar

assistant: kabir lawal

diagnosis: PI (alive), ± 2 cm 0 urethrovesicovaginal fistula with circumferential defect type **IIAb**, leaking urine of 1 yr which started immediately following cs bco obstructed labor for 2 days, live female, married 4 yr ago pre(menarche 5 mth later), not living with husband, normal menstruation, bilateral drop foot for 2 mth R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no eclampsia; normal ap diameter/pubic arch 85°, ar pos, bilateral atf/atl + pc_ilc_iscm loss, cervix fixed midline
euo/f 2 cm, f/c 3 cm, ab/au 1 cm, i/v cm 146.5 cm

operation: uvvf-repair + bilateral pcf refixation

duration: 50 min

healing 85% continence 85%

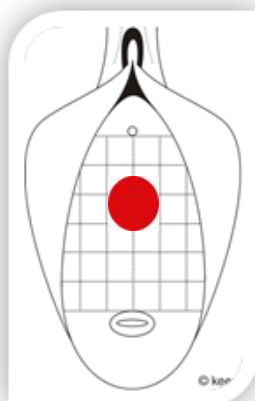
anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

episiotomy L, incision at fistula edge, sharp dissection, tension-free transverse bladder /urethra closure by single layer of inverting serafit, bila teral fixation of pc fascia onto paraurethra_euo atf/symphysis by 2x serafit each side, **no** urine thru suture line/euo on rest/cough/pressure, foley ch 18, transverse avw adaptation by 2x everting seralon, check on hemostasis, skin closure; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 2 cm

normal bladder capacity (longitudinal diameter 12-2 = 10 cm)

acceptable position of uv-junction **fixed against** middle/caudad third of symphysis

normal-width 2 cm medium-quality urethra_euo in anatomic position



2 cm 0

RR
preanesthesia: 130/80 mm Hg
5': 120/80
10': 120/70
postoperation: 120/70

pt 380

katsina
anterior trauma

vvf 8208

h a d f (katsina)

female

30 yr

29.10.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PVII (5 alive), large cystocele without urine intrinsic_stress incontinence, something coming out of vagina for 10 yr which started immediately following obstructed third labor for 1 day, at home live male, married 18 yr ago pre(menarche 1 yr later), still living with husband, normal menstruation, no (h/o) drop foot R (grade 5) and L (grade 5), no rvf, yankan gishiri no, eclampsia no; normal ap diameter/**wide** pubic arch 95°, ar pos, 1°-2° cervix "prolapse" **no** masked incontinence (after reduction)
euo/c 7 cm **narrow** urethra_euo in anatomic position
euo/bw 12 cm, poor elevation, euo/b 1.7 cm, i/v 12 cm 156.5 cm

operation: longitudinal fascia repair/bilateral fixation

duration: 25 min (**step-by-step teaching**) healing 95% continence 95%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse curved incision at 2 cm from euo parallel/within ruga folds, sharp dissection, 5x2.5 cm median longitudinal fascia defect from cervix upto 2 cm to euo, longitudinal pc fascia repair at 1.5-6 cm from euo by serafit, now euo/b 2.6 cm, **no** urine thru euo on rest/cough/pressure, bilateral fixation of fascia onto paraurethra atf by 1x serafit each side, triple fixation of foley ch 18, transverse avw_pcf/symphysis_atf_avw adaptation by 2x everting seralon, check on hemostasis; free urine flow, euo/bw 12 cm, good elastic anterior elevation, euo/b 2.6 cm (**urethralization**) cervix mobile but **no** prolapse normal bladder capacity (longitudinal diameter 12-2.6 = 9.5 cm)
good position uv-junction **against** middle third symphysis
good fascia plate good-quality pcm
narrow 2.5 cm good-quality urethra_euo in anatomic position

RR

preanesthesia: 130/80 mm Hg

5': 130/80

10': 130/80

postoperation: 120/80

pt 381

katsina

vvf 8209

anterior (ruptured bladder-uterus) + iatrogenic trauma

a s w (katsina)

female

39 yr

29.10.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PXI (8 alive), **“inoperable” ragged longitudinal ± 4x2 cm 0 urethrovesico vaginal fistula type IIAa, leaking urine of 37 days** that started immediately after tah-cs bco obstructed labor of 3 days, sb male, married 26 yr ago post(menarche 1 mth earlier), still living with husband, no menstruation, drop foot R (grade 3) and L (grade 3), no rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/pubis arch 85°, ar pos, vault fixed/moving euo/f 2.5 cm, f/v 0.5 cm, i/v 12 cm 151.0 cm

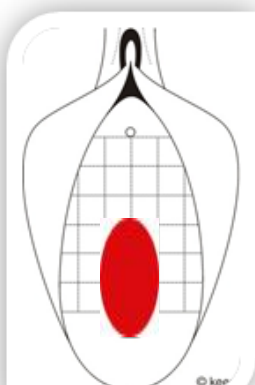
operation: **ps-like longitudinal** avw closure

duration: 25 min

healing 70% continence 90%

anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

small episiotomy L, both ureter **identified** but cannot be catheterized, incision at fistula edge, sharp minimal dissection, the only thing possible is **ps-like longitudinal** avw closure by 7x everting seral on (with resulting inverting bladder adaptation), **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, hemostasis check, skin closure; free urine flow, euo/bw 12 cm, good anterior elevation, euo/b 2.5 cm normal bladder capacity (longitudinal diameter 12-2.5 = 9.5 cm) good position of uv-junction **against** middle third of symphysis normal-width 2.5 cm good-quality urethra_euo in anatomic position



“inoperable” 4x2 cm

	RR
preanesthesia:	120/80 mm Hg
5':	120/70
10':	110/70
postoperation:	110/70

pt 382

katsina

vwf 8210/3793/.7174

a s g (rép niger)

female

30 yr

29.10.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PI, 3° cervix prolapse with post **IIBb** incontinence grade II, she comes for the prolapse, following multiple repairs 27.3.97 to 15.7.07 following sthcs, still living with husband, no menstruation (hysterectomy) drop foot R (grade 5) and L (grade 3) with gc_at contracture up to 90°/0° dorsiflexion; normal ap /pubic arch 85°, **empty pelvis** due to **major** atf/atl_pc_io_ilc_ism loss + sul trauma
euo/bw 12 cm, poor elevation, euo/b 1.4 cm, i/v 10 cm 166.0 cm

operation: cervix fixation at L

duration: 10 min

healing 95% continence 50%

anesthesia: spinal L3/L4 with 4 ml bupivacaine 0.5%

small incision L avw with extension up to cervix, sharp dissectio to create wound area, fixation of cervix onto L pubic bone by 2x seralon, euo/b now 2.8 cm, **no** urine thru euo on rest/cough/pressure, foley ch 18; check on hemostasis; free urine flow, euo/bw 12 cm, good anterior elevation at L, euo/b 2.8 cm
normal bladder capacity (longitudinal diameter 12-2.8 = 9 cm)
good position uv-junction **against** middle third of symphysis
"normal-width" 2.5 cm medium quality urethra_euo slightly pulled posteriorly inside

RR

preanesthesia: 130/80 mm Hg

5": 130/80

10": 130/80

postoperation: 130/80

pt 383
pt

katsina
third obstetric fistula
mdg 047

vvf 8211
vvf 4753
cath aahaa

h s r (katsina) female 36 yr 29.10.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: PXI (0 alive), **mutilated** 0.5 cm 0 urethrovesicovaginal fistula **IIAa** lungu L, leaking urine for 2 yr which started immediately following obstructed last labor for 2 days, at home sb male, married 25 yr ago pre(menarche 2 yr later), still living with husband, nor mal menstruation, drop foot R (grade 5) and L (grade 5), no rvf, no yankan gishiri, no h/o eclampsia; normal ap diameter/pubis arch 85°; transverse 5x1 cm pcf defect, impacted 8x6x5 cm stone removal 16.7.11
euo/f 4 cm, f/c 0 cm, i/v 12 cm 145.0 cm

operation: **highly complicated** uvvf-repair

duration: 45 min healing 80% continence 95%

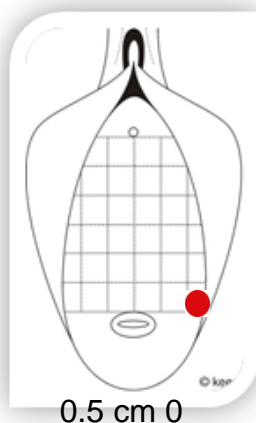
anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision thru repair scar/fistula, sharp dissection, excision of scar tissue ++, tension-free transverse **fibrotic** pcf repair with **highly complicated** bladder/urethra closure by single layer of inverting serafit, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw/cervix adaptation by 2x everting seralon, hemostasis check; free urine flow, euo/bw 13 cm, good anterior elevation, euo/b 3.1 cm

normal bladder capacity (longitudinal diameter 13-3.1 = 10 cm)

good position of uv-junction **against** middle third of symphysis

normal-width 3 cm good-quality urethra_euo in anatomic position



RR
preanesthesia: 130/80 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80

pt 384
pt
pt

katsina mdg
second obstetric fistula

vvf 049 vvf 8212/7650/7849
v vf 4556
v vf 5113

a b b (katsina) female 26 yr 30.10.11

surgeon: kees waaldijk

assistant: kabir lawal

diagnosis: residual \pm 0.5 cm lungu fistula R with total post extensive **IIBb** intrinsic incontinence following multiple repairs 2.6.01 to 17.07.11, still living with husband, normal menstruation, drop foot R (grade 3) and L (grade 5) both with gm_at contracture up to 90°/0° dorsiflexion, no rvf, no yankan gishiri, no eclampsia; normal ap diameter/narrow pubic arch 75°, ar pos, bilateral **major** atf/atl + pc_ io_ ilc_ iscm loss, severe shortening, cervix fixed i spine R “**open**” urethra_euo with **objective** stress ++
euo/f 4 cm, f/c 0 cm, i/v 6 cm 154.5 cm

operation: uvvf-“repair” **last resort final**

duration: 20 min healing 70% continence 70%

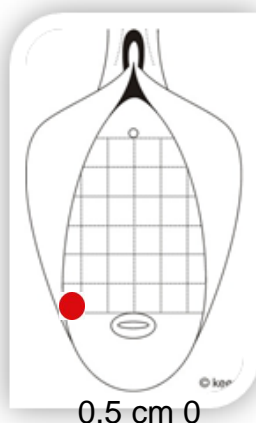
anesthesia: spinal L4/L5 with 3 ml bupivacaine 0.5%

transverse incision thru fistula, sharp dissection, excision of scar tissue +, tension-free transverse bladder/atf/urethra closure by 1x serafit cross, **no** urine thru suture line/euo on rest/cough/pressure, triple fixation of foley ch 18, transverse avw/cervix adaptation by 2x everting seralon, hemostasis check; free urine flow, euo/bw 11 cm, good anterior elevation, euo/b 2.2 cm

normal bladder capacity (longitudinal diameter 11-2.2 = 9 cm)

good position of uv-junction **against** middle third of symphysis

normal-width 2 cm medium-quality urethra_euo in “anatomic position”



RR
preanesthesia: 130/90 mm Hg
5': 130/80
10': 130/80
postoperation: 130/80