

# Obstetrical vaginal fistula: surgical approach

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# Definition

- ◆ Tissue destruction secondary to the prolonged pressure of the head during obstructed labour (ischaemic laesion)
- ◆ Tissue laceration during instrumental delivery, Caesarian section or Caesarian hysterectomy

# Problem

- ◆ Abandoned from their families
- ◆ Co-morbidity
  - Infections
  - Bladder stones
  - Infertility



# Prevalence

- ◆ estimated : 2 mio women worldwide
- ◆ Africa, Asia, South America
  - Sub-saharan Africa: 2/1000 deliveries



## Simple fistula

- Non-fibrotic tissue
- Easy to access



## Complex fistula

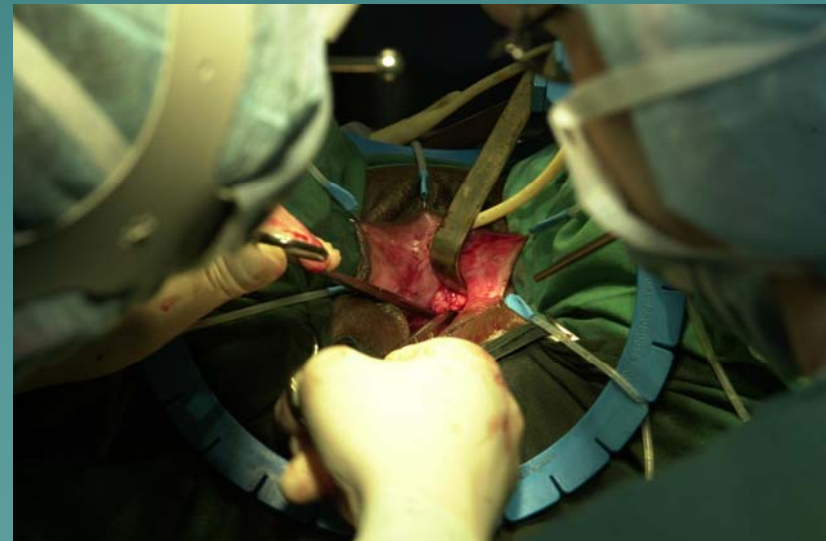
- Fibrotic tissue
- Loss of tissue
- Urethral involvement
- Retracted bladder
- Aberrant tract
- Previous failed surgery

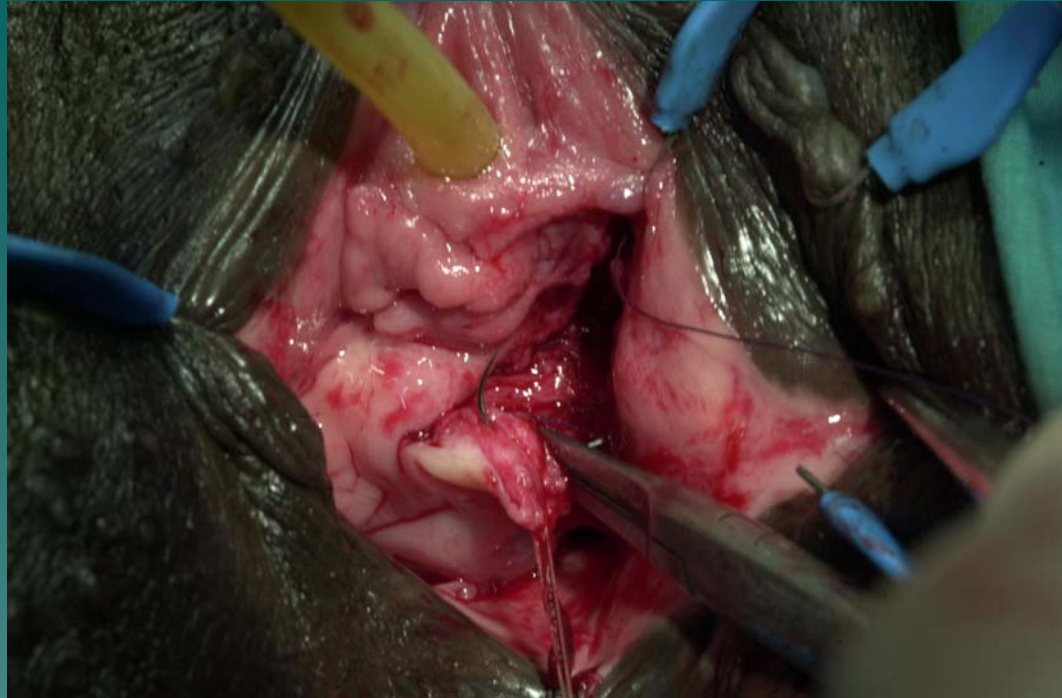




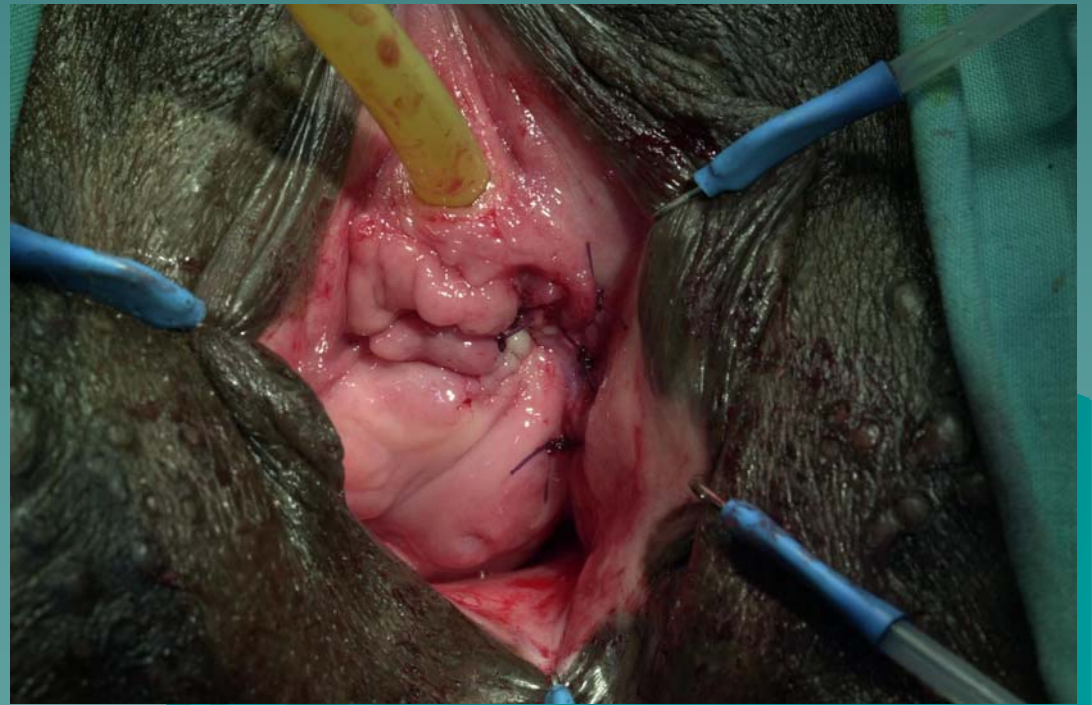
# Surgical tips

- ◆ Extended Trendelenburg position
- ◆ Scott retractor
- ◆ Headlight
- ◆ Sharp scissors
- ◆ Suture material
  - ◆ Post op follow-up
  - ◆ Cave: obstructed catheter !

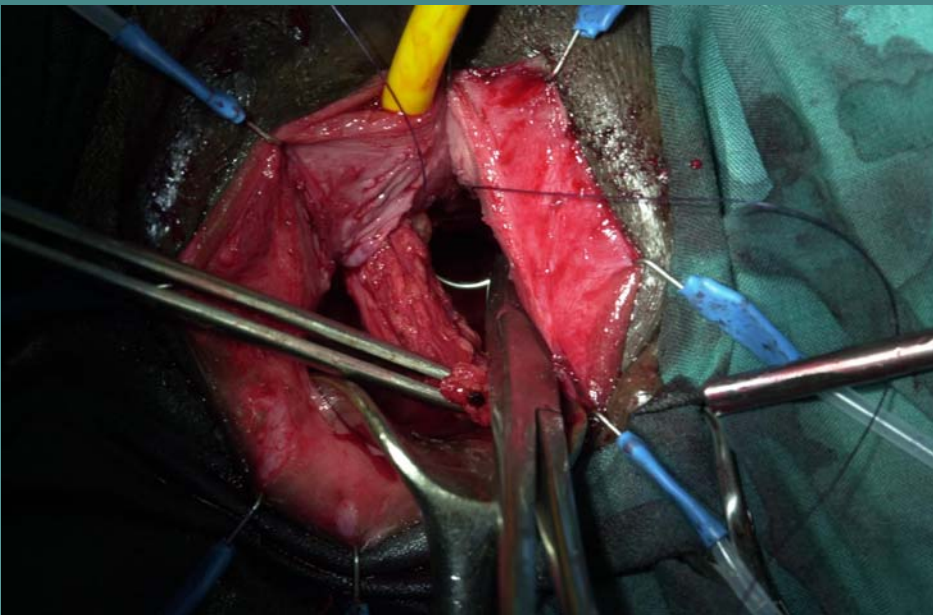
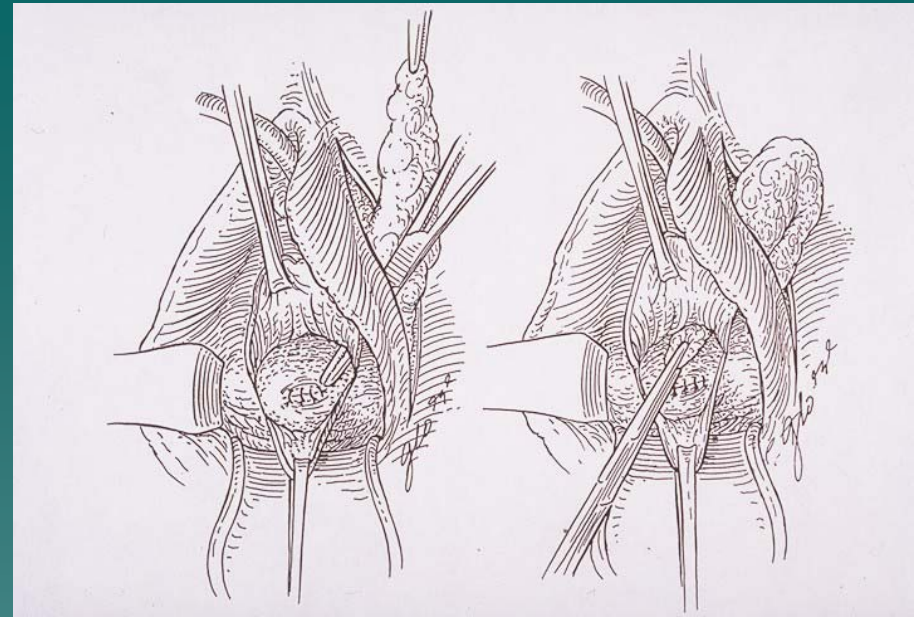
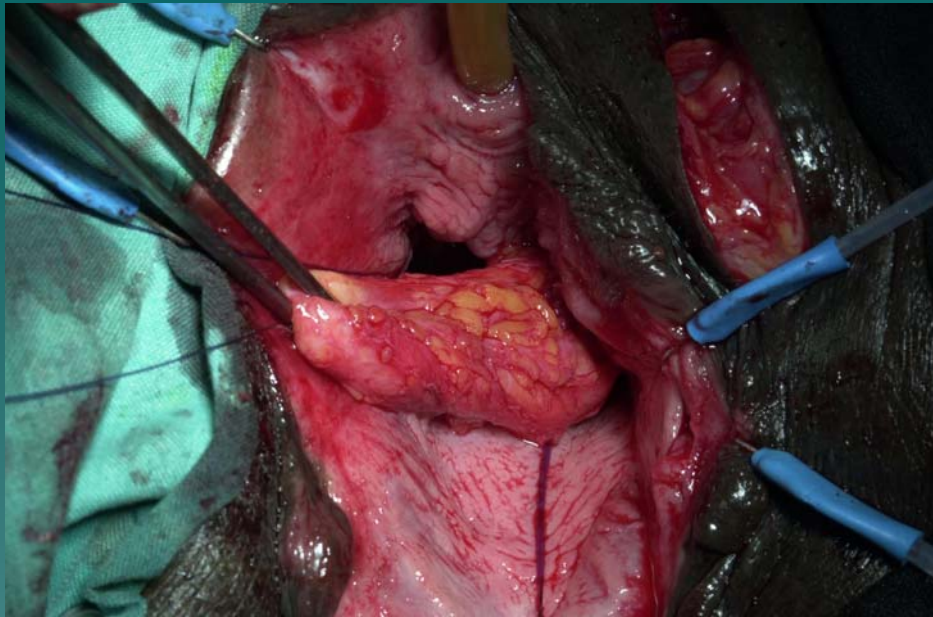




Simple closure

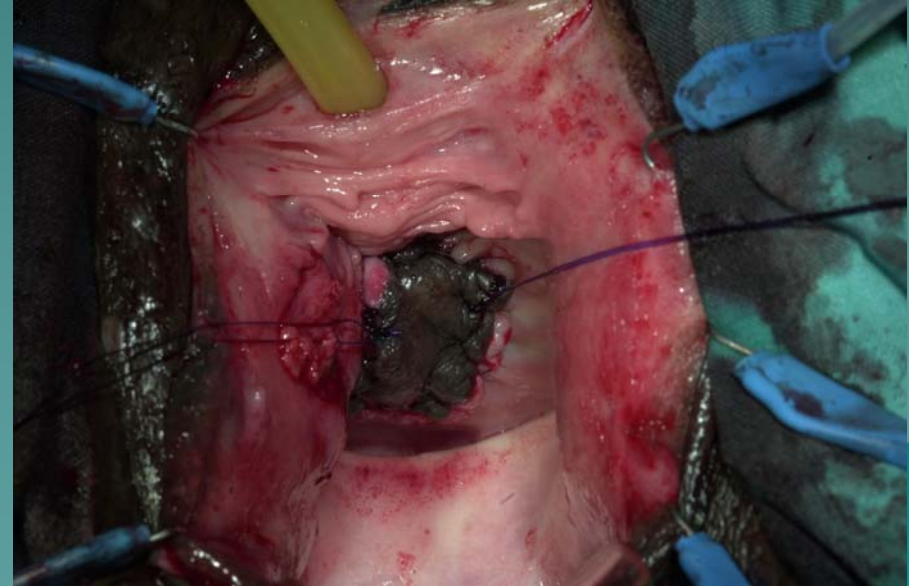
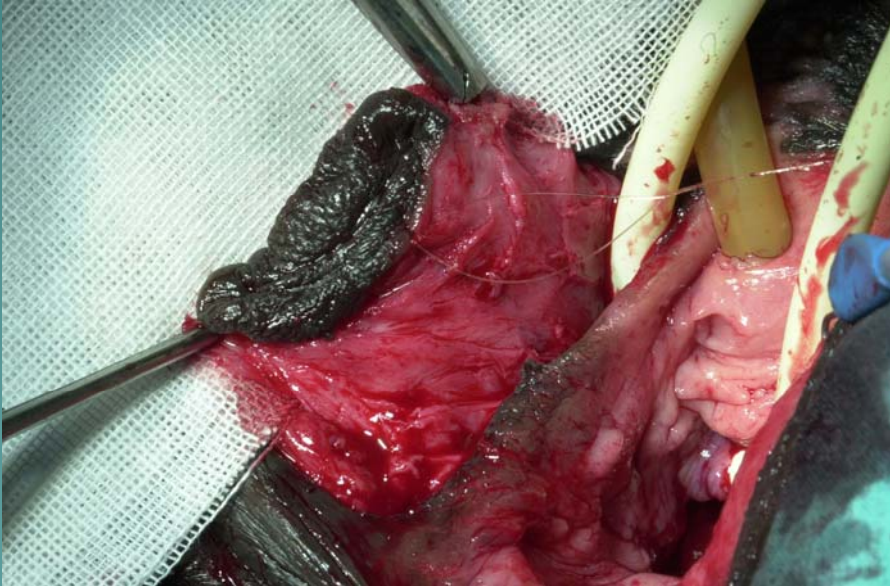
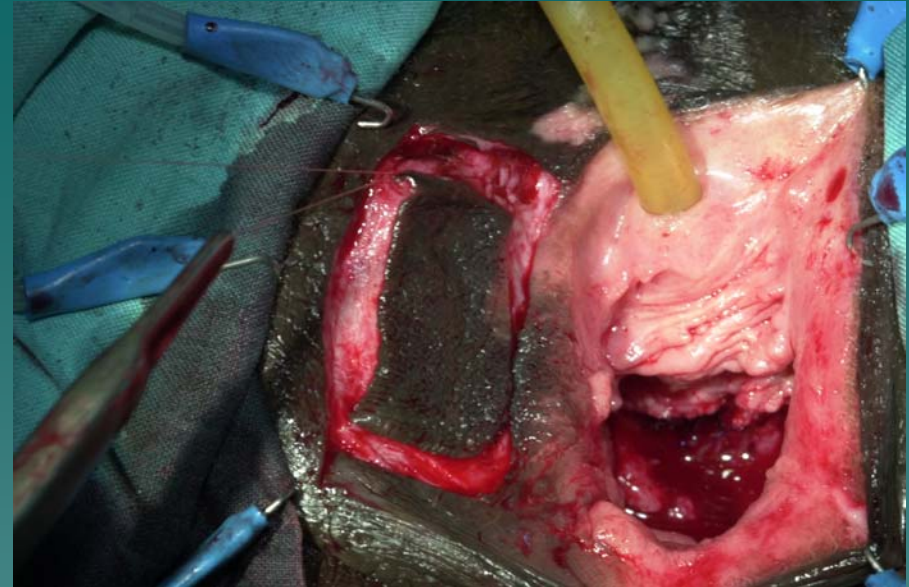






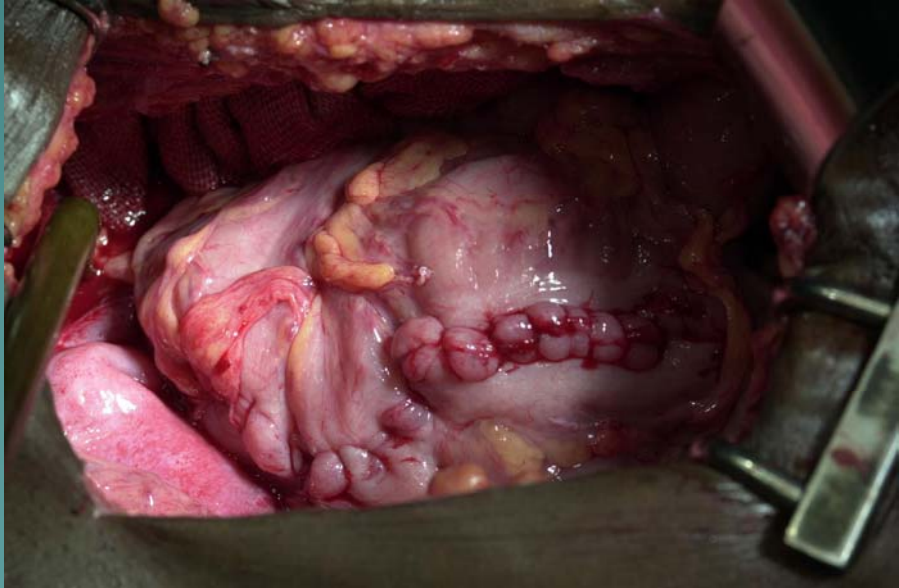
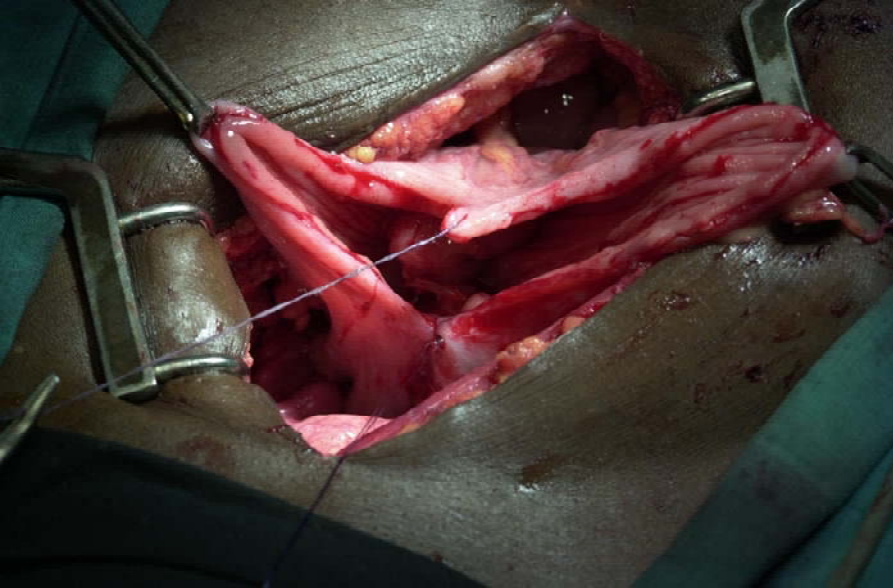
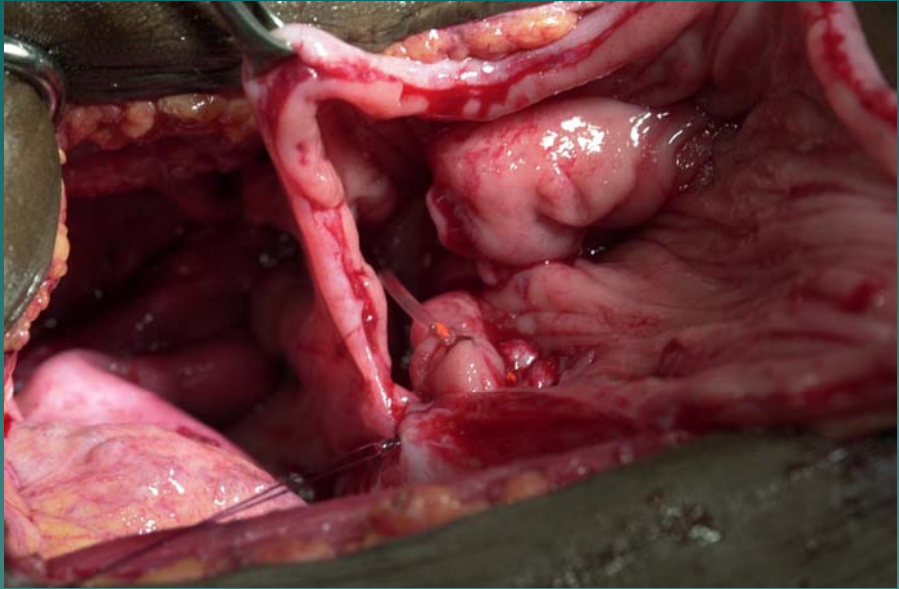
## Martius Flap





Symmonds / Falandry





Mayence II

# Tanguieta case series

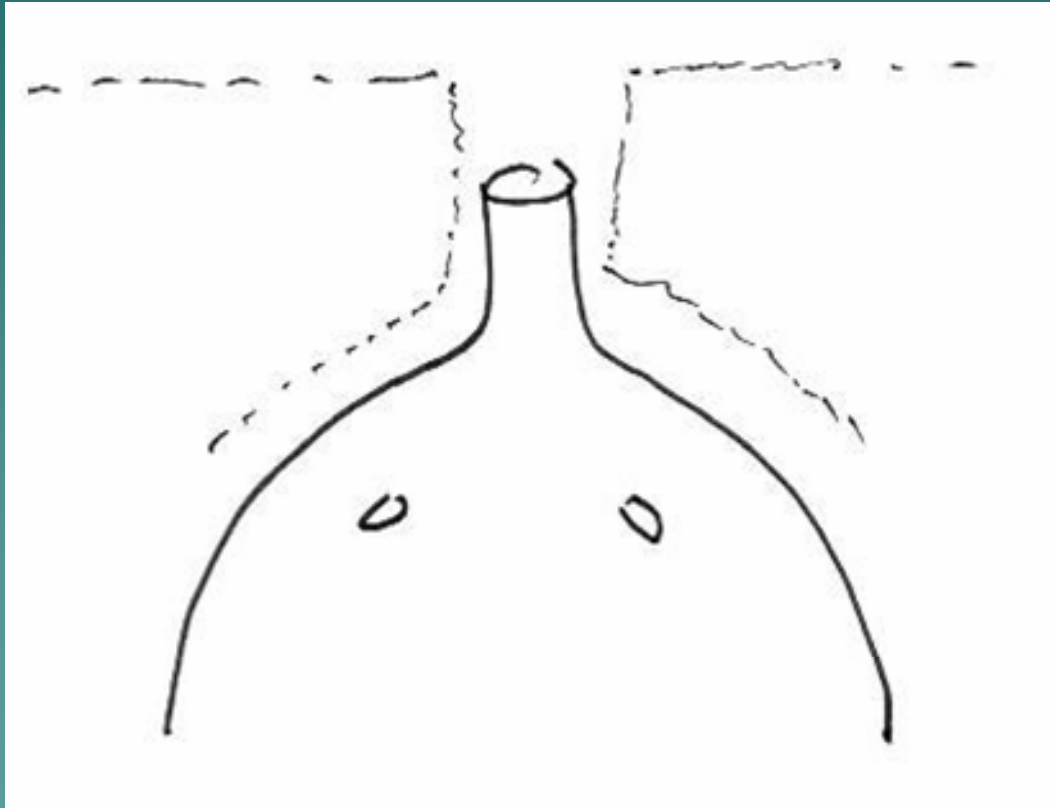
- ◆ Hospital northern Benin
- ◆ 10 urological missions since 1993
- ◆ Since 1996 specific visits for surgical fistula repair
  
- ◆ obstetrical fistulae  
N = 132



# Case series 1996 - 2003

<b>Baseline data</b>	n=132
Age y (median, range)	28.9 (15-63)
Parity n (median, range)	2.0 (1-11)
Duration y (median, range)	3.0 (0.1-20)
Previous attempt for fistula repair n (%)	42 (31.5)
Lost to follow-up n (%)	20 (15.03)

# Case series 1996 - 2003 Localisation of vesicovaginal fistulae



Urethral  
and/or  
Trigonal

79%

Supra-  
trigonal

21%

# Case series 1996 – 2003

## Surgical approach

- ◆ Vaginal 76%
  - ◆ Abdominal 18.6%
  - ◆ Combined 5.4%
- 
- ◆ Urinary diversion 6 cases
  - ◆ Recto-vaginal fistulae 5 cases



# Outcome of Vesico-vaginal fistula repair n=100

- ◆ Success rate 84%
- ◆ Stress incontinence 21%
- ◆ Complications 1 fatal peritonitis
- ◆ 3 reinterventions for secondary suture

# Conclusions

- ◆ Majority can be treated by vaginal approach
- ◆ Martius flap preferable for urethral suspension and tissue interposition
- ◆ Urinary diversion rarely mandatory
- ◆ Stress incontinence remains an issue for further improvement







# Case series 1996 - 2002

## Localisation

Urethral n (%)	35 (34.7)
Trigonal n (%)	60 (59)
Supratrigonal n (%)	39 (38.6)

# Case series 1996 - 2002

- ◆ Complications at the time of delivery
  - perinatal mortality: 98%
  - Ruptured uterus: 10%
- ◆ Sectio rate: 40%
- ◆ Maternal mortality?

# Case series 1996 – 2002

## Surgical technique

Martius graft n (%)	32 (31.7)
Cutaneous graft n (%)	12 (11.9)



# Case series 1996 – 2003

## Outcomes

n=112		Vesico-vaginal Fistula
<b>Success rate n (%)</b>		<b>84 (76.4)</b>
<b>Treatment failure</b>		<b>16</b>
<b>Stress incontinence n (%)</b>		<b>21 (24))</b>
<b>Urinary diversion n (%)</b> (uretero –		<b>6 (4.6)</b>

# Case series 1996 – 2002

## Outcomes

		VVF n = 101	RVF n = 6
Success rate n (%)		60 (59.4)	4 (67)
Complications n (%)			
	Stress incontinence	13 (21.6)	
	Bladder stone	6 (5.9)	
Urinary diversion n (%) (uretero – sigmoidostomie)		6 (5.9)	

# Case series 1996 - 2003

## Localisation of fistulae

