

# Obstetric Fistula

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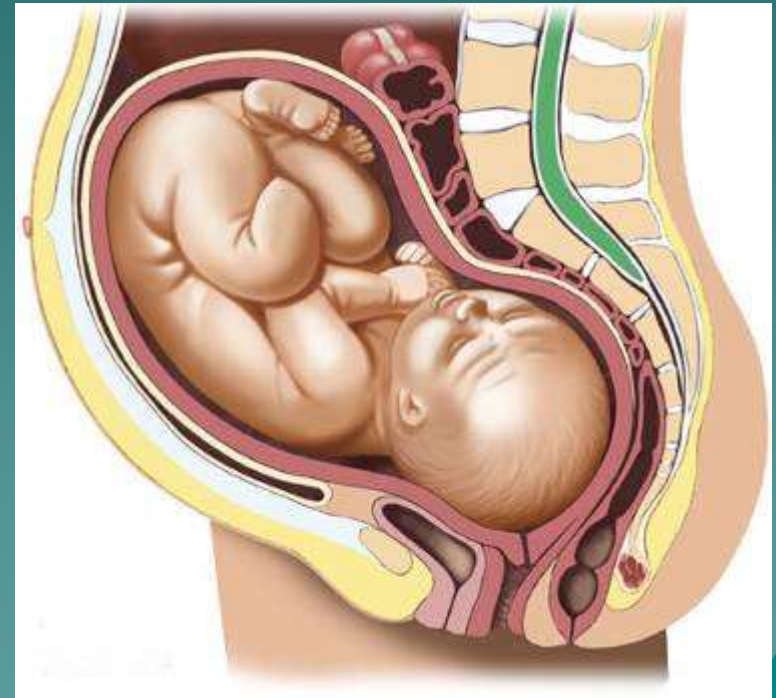
Geneva Foundation for Medical Education  
and Research ([www.gfmer.ch](http://www.gfmer.ch))

Faculty of Health Sciences Cotonou, Benin

Training Course in Sexual and Reproductive Health Research  
Geneva 2013

# Definition

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



# Classification

## Simple fistula

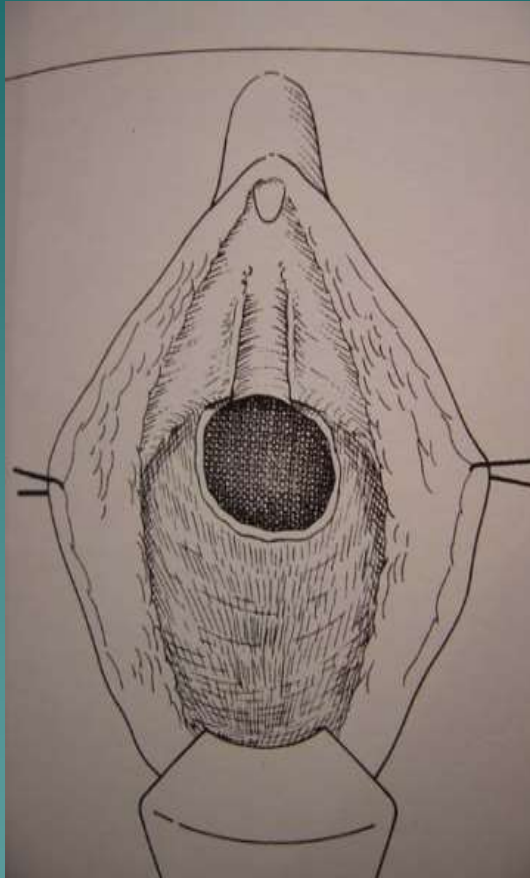
- Non-fibrotic tissue
- Easy to access

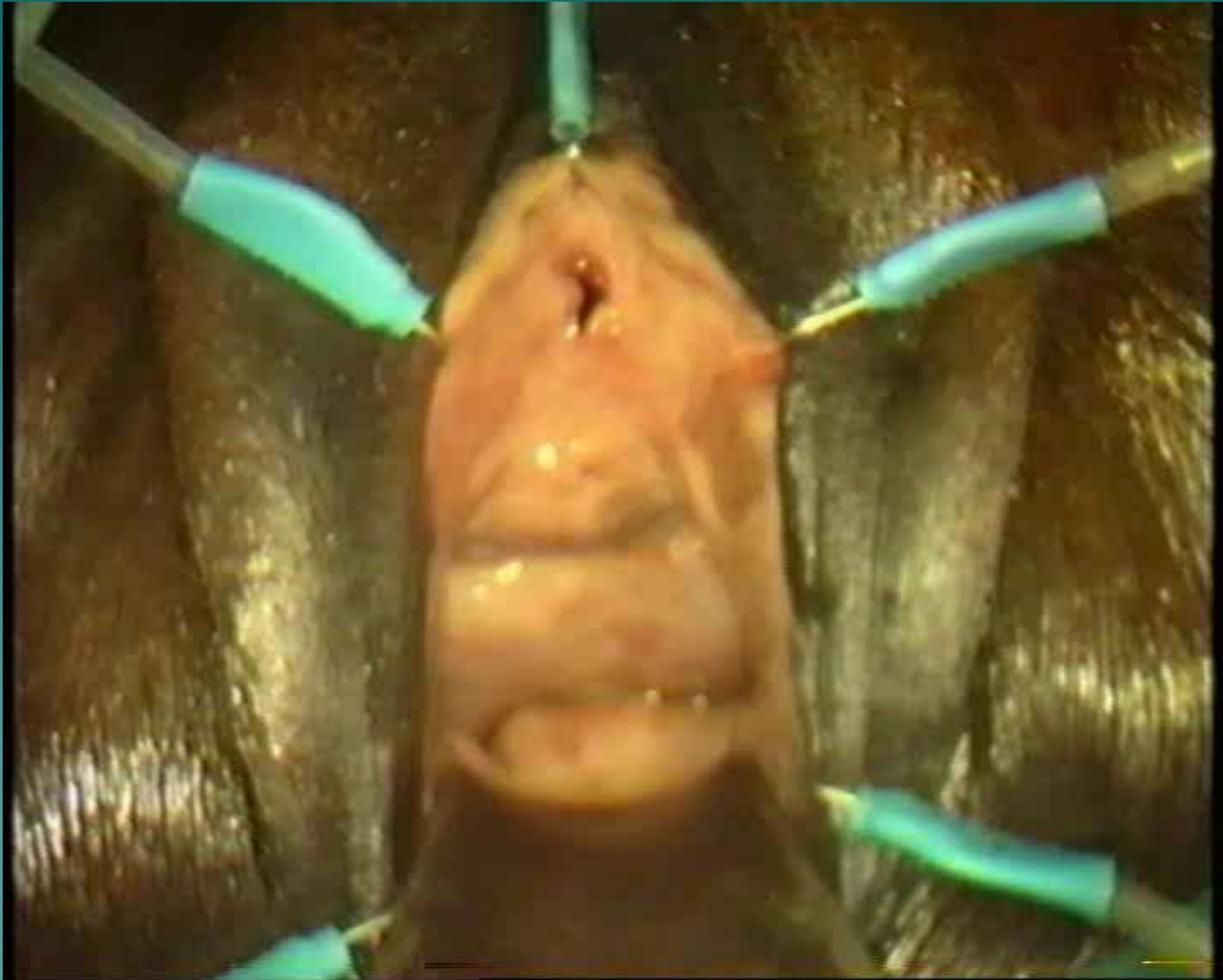
## Complex fistula

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



# Complex VVF





[http://www.gfmer.ch/Video/Extrait\\_fistules.wmv](http://www.gfmer.ch/Video/Extrait_fistules.wmv)

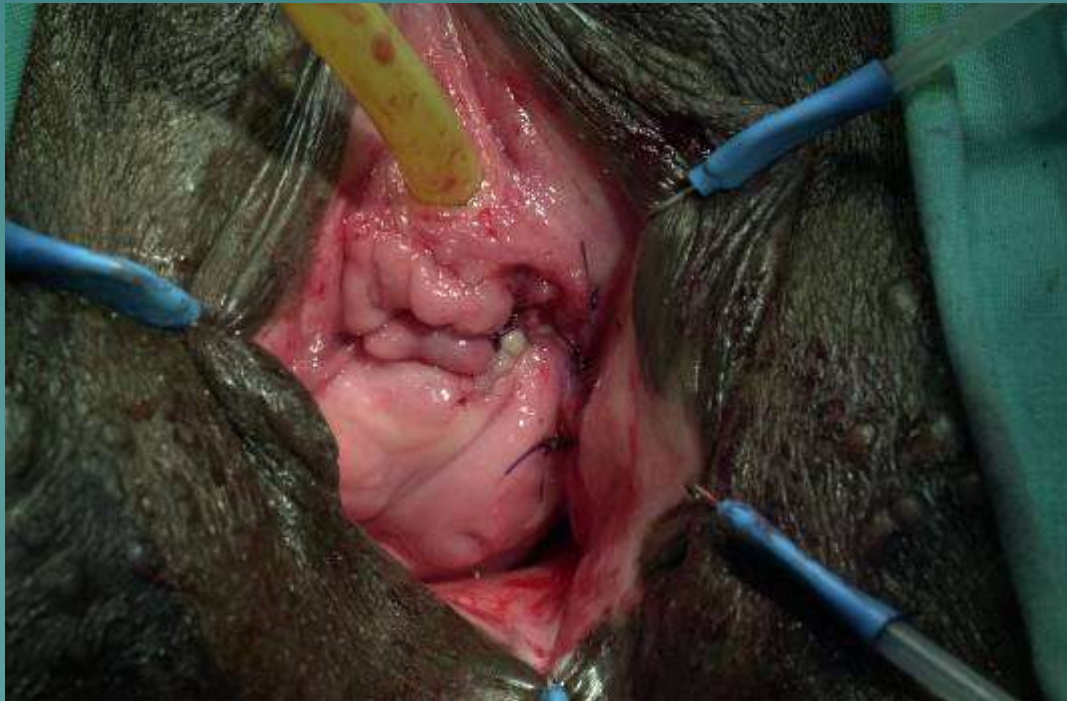
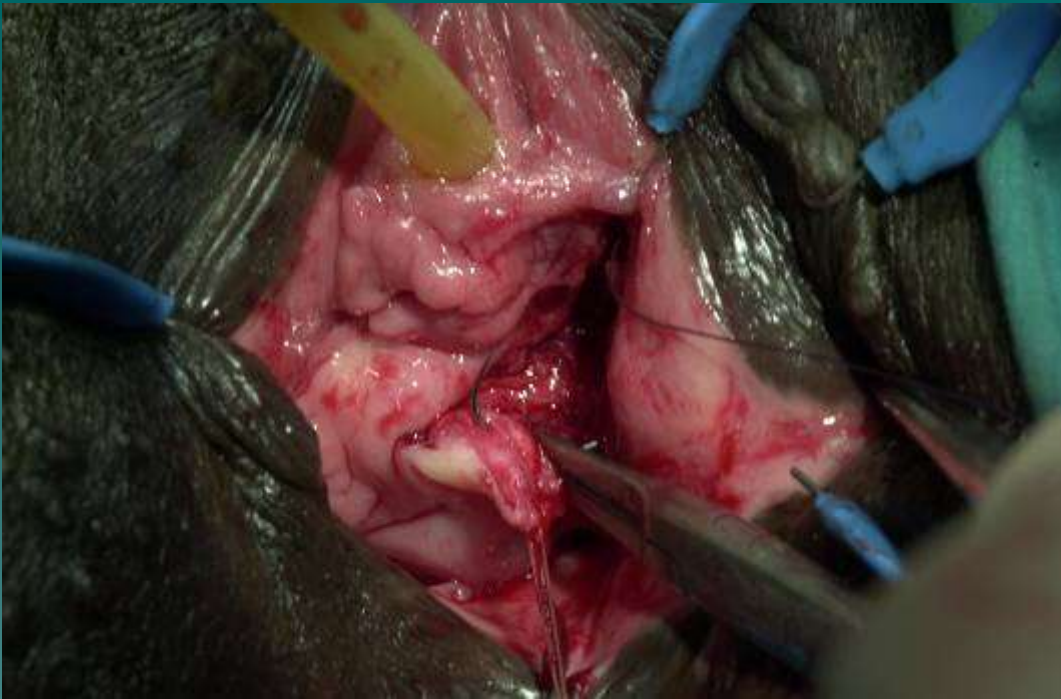
# Surgical tips

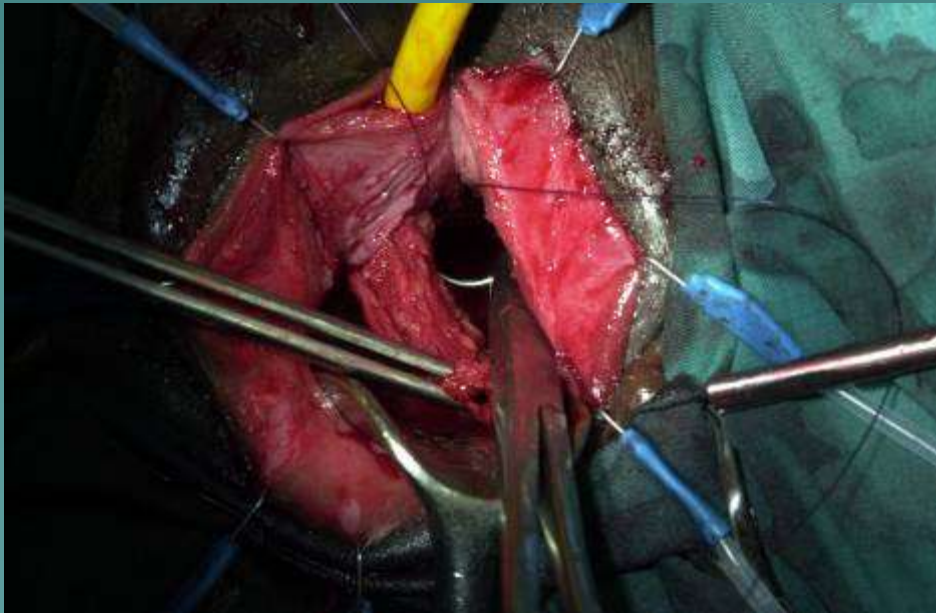
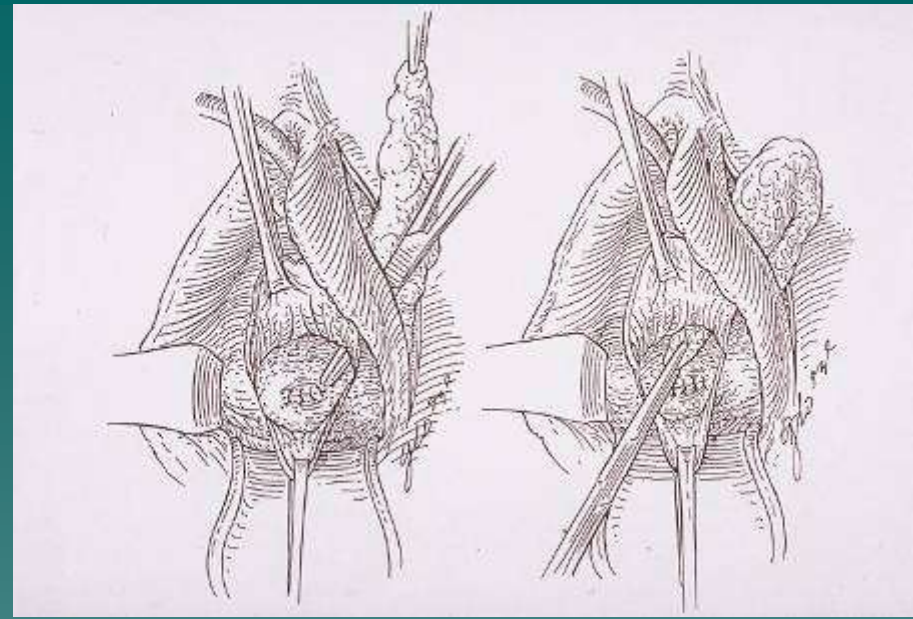
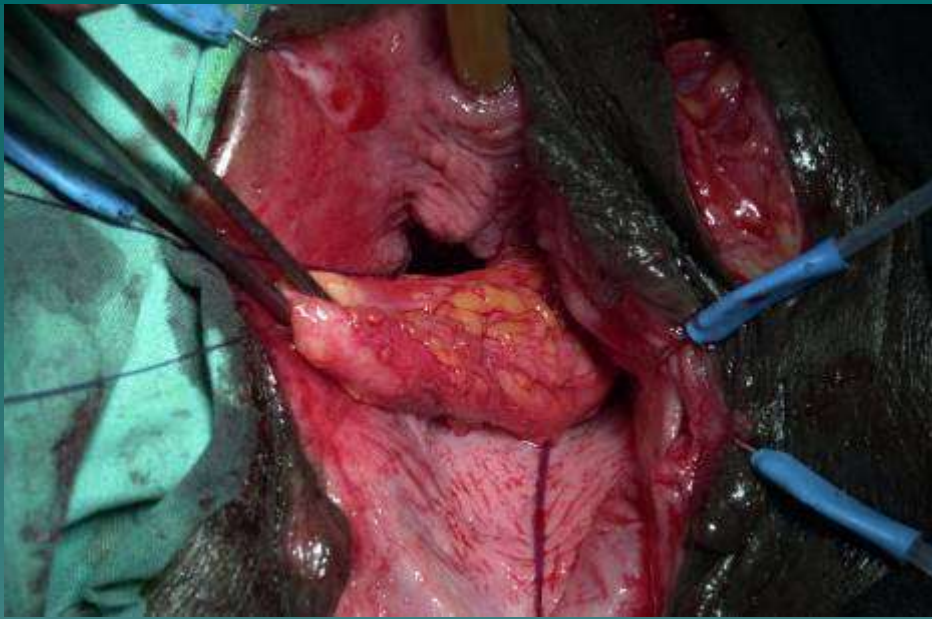
- ◆ Extended Trendelenburg position
- ◆ Scott retractor
- ◆ Headlight
- ◆ Sharp scissors
- ◆ Suture material
  - Post op follow-up
  - Cave: obstructed catheter !



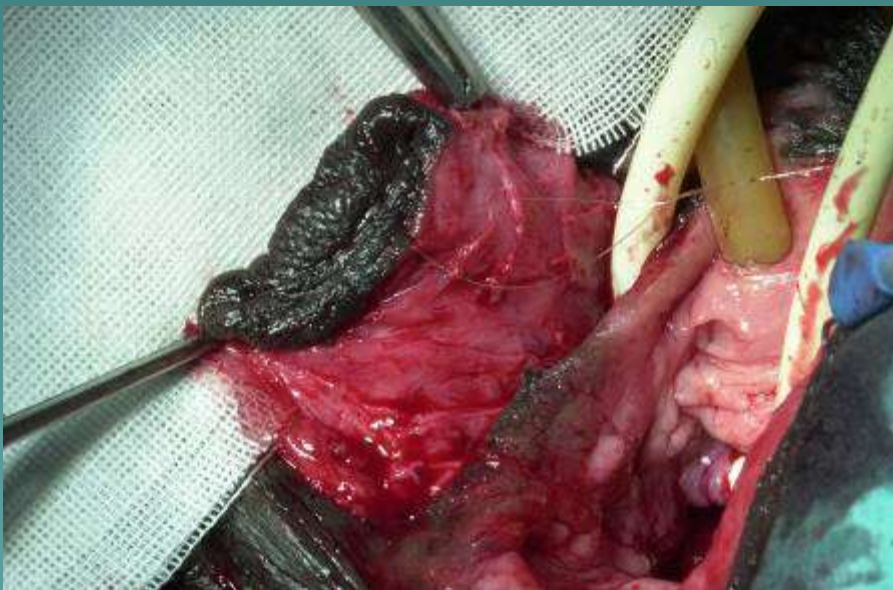
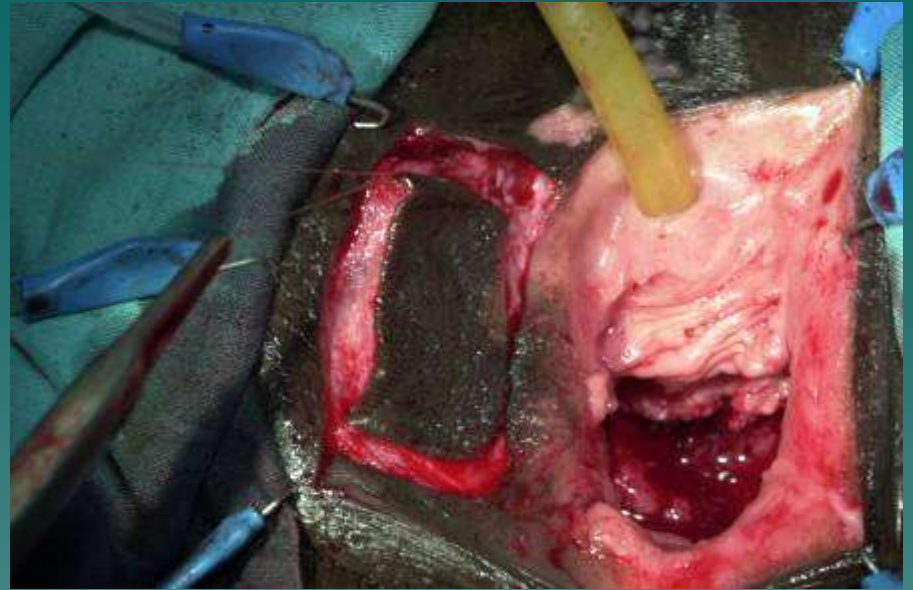


Simple closure

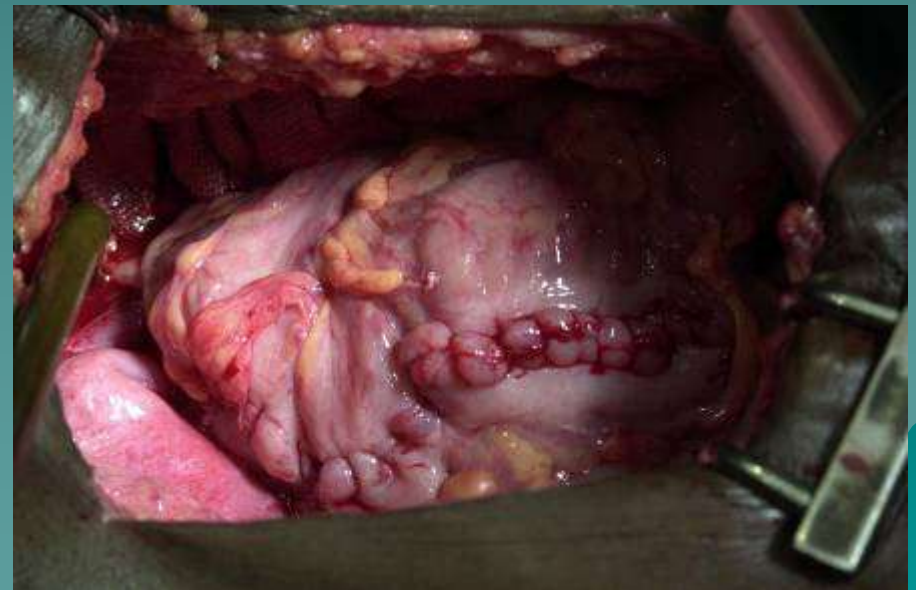
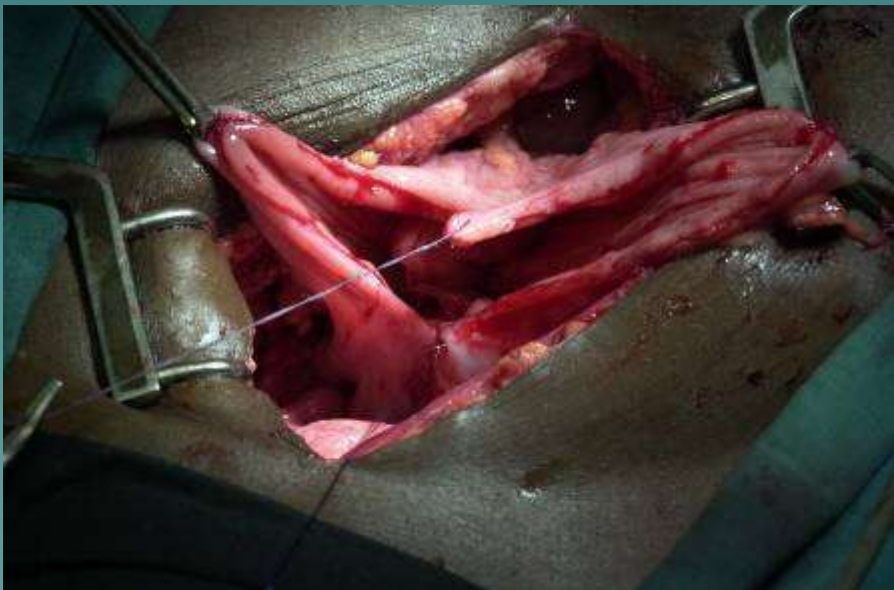
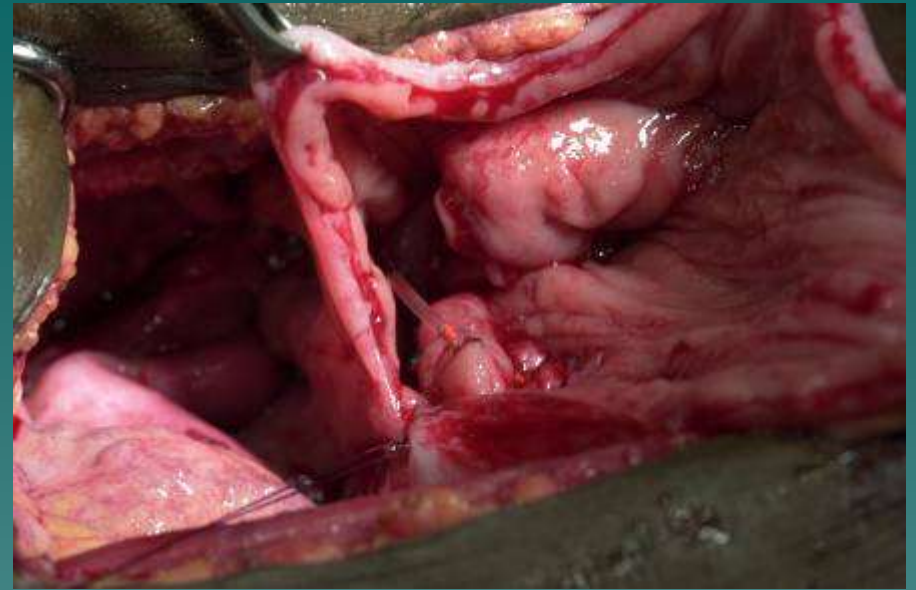




## Martius Flap



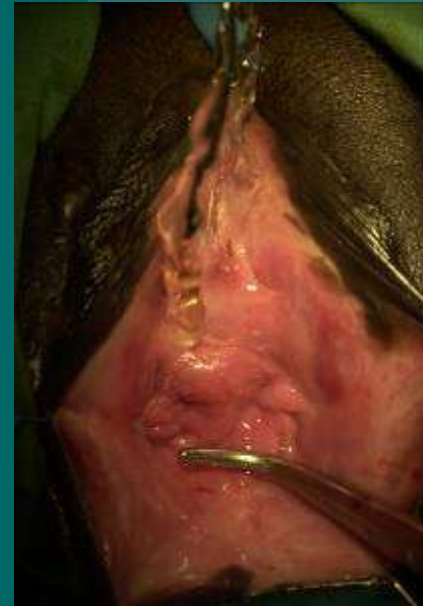
Symmonds / Falandry



Mayence II

# Stress incontinence

- ◆ Junction bladder/urethra most often concerned
- ◆ Closure mechanismus damaged
- ◆ Residual stress incontinence
- ◆ Surgical challenge



For experts and motivated surgeons



[http://www.gfmer.ch/Video/Reconstruction\\_cervico-uretrale.wmv](http://www.gfmer.ch/Video/Reconstruction_cervico-uretrale.wmv)

# African tape TVT / TVTO

2001

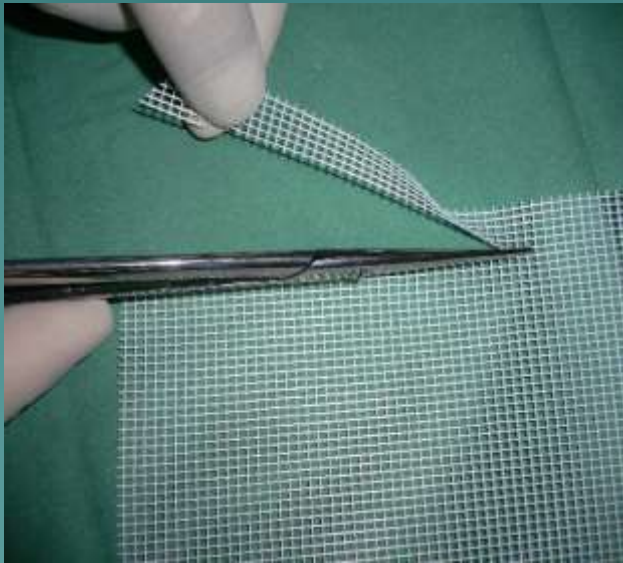
Mopti

6 cases

2005/2006

Tanguieta

8 cases



Preliminary study



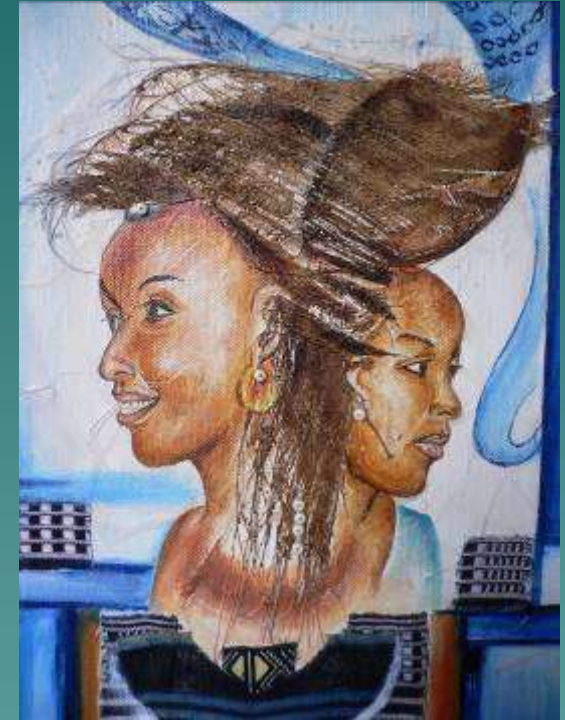
<http://www.gfmer.ch/Video/Bandelette.wmv>



# The model of Tanguieta



Treatment  
Training  
Prevention



Internet Database (GFMER)

# The model of Tanguieta

- ◆ GFMER, St. Jean de Dieu Hospital and Faculty of Health Sciences, Cotonou
- ◆ Comprehensive strategy for training health care providers
- ◆ Treatment and prevention of obstetric fistula
- ◆ Exported to centres in Guinea (Conakry), Burkina Faso (Fada N'Gourma) and Cameroon (Maroua)

# A new Web-Based Data Entry System : the GFMER Database

- ◆ Collection and evaluation of prospective data
- ◆ Demographic characteristics of fistula patients
- ◆ Various surgical and clinical procedures for fistula repair
- ◆ Social reintegration

# A new Web-Based Data Entry System : the GFMER Database

- ◆ Facilitate the development of a standardized fistula classification
- ◆ Comparative research across surgical centres
- ◆ Identification of cases requiring expert fistula surgeon

# Areas covered by the GFMER Database

- ◆ Circumstances leading to the occurrence of fistula
- ◆ Socioeconomic and preoperative health status
- ◆ Surgical and other medical treatments received
- ◆ Postoperative health status and follow-up

The screenshot displays the GFMER Database website interface. At the top, there is a navigation menu with links for Languages, Home, Foundation, Search, Education, Partners, Publications, Databases, links, and Navigation. The main heading is 'Fistula' with a sub-heading 'Welcome shown (My account | Logout | Help)'. Below this, there are 'Instructions' and a note about the database being in a 'TESTING-PHASE'. A dropdown menu shows 'Currently displayed study: Fistula'. A secondary menu includes 'Data', 'New Patient', 'Statistics', 'Resources', and 'Maps'. The primary menu is 'Admission', 'Pre-op', 'Surgery', 'Post-op', and 'Follow up'. The 'Admission Form' section is highlighted and contains the following fields:

- A. 1. Date of data collection: day, month, year
- B. Identification of the centre:
  - 2. Code of the centre: choose a centre
  - 3. Code of the surgeon: choose a surgeon
- C. Identification of the patient:
  - 4. File number: [input field]
  - Previous hospitalizations in our hospital:

# GFMER Research and Studies

3 critical areas of research in collaboration with WHO/RHR

## ◆ Prevention:

- analysis of underlying sociocultural and economic factors
- caesarean sections
- labour management techniques

## ◆ Treatment:

- review and assessment of current surgical and medical procedures

## ◆ Reintegration:

- evaluation of existing reintegration strategies



# Tanguieta personal case series 1996 - 2006

- ◆ Hospital northern Benin
- ◆ 13 surgical missions since 1993
- ◆ Since 1996 specific visits for surgical fistula repair
  
- ◆ obstetric fistulae  
N = 202



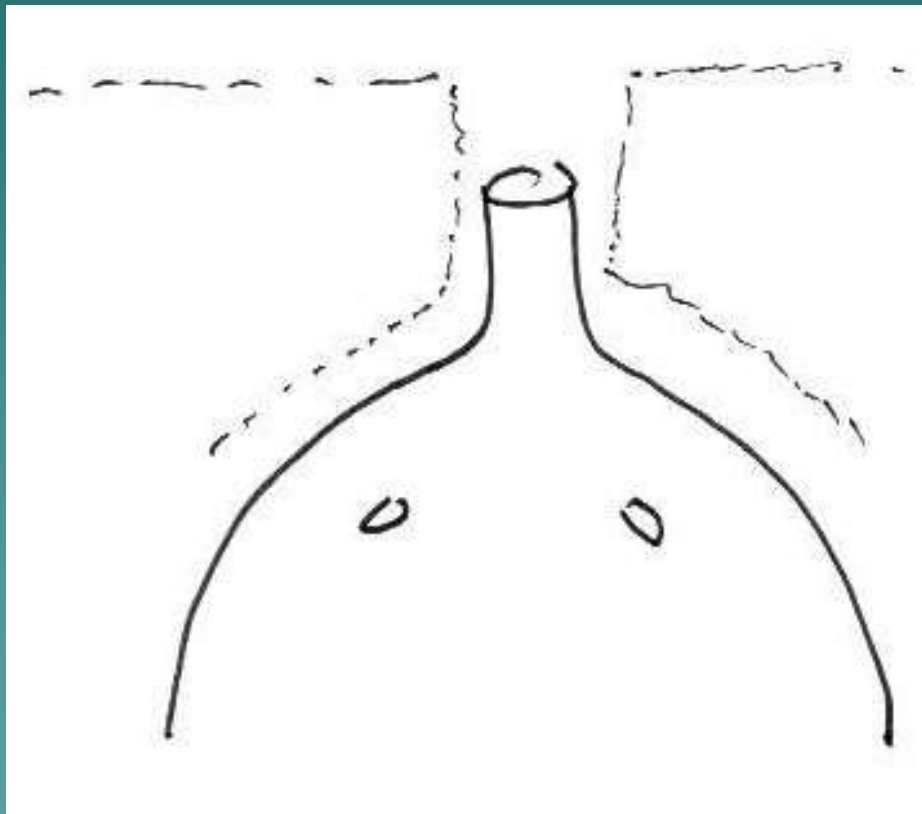
# Tanguieta personal case series 1996 - 2006

<b>Baseline data</b>		n=202
Age	y	28.9 (15-63)
Parity	n	2.0 (1-11)
Duration	y	3.0 (0.1-20)
Previous fistula repair	n (%)	72 (35.6)
Lost to follow-up	n (%)	23 (11.4)

# Tanguieta personal case series 1996 - 2006

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

# Tanguieta personal case series 1996 - 2006



## Localisation VVF

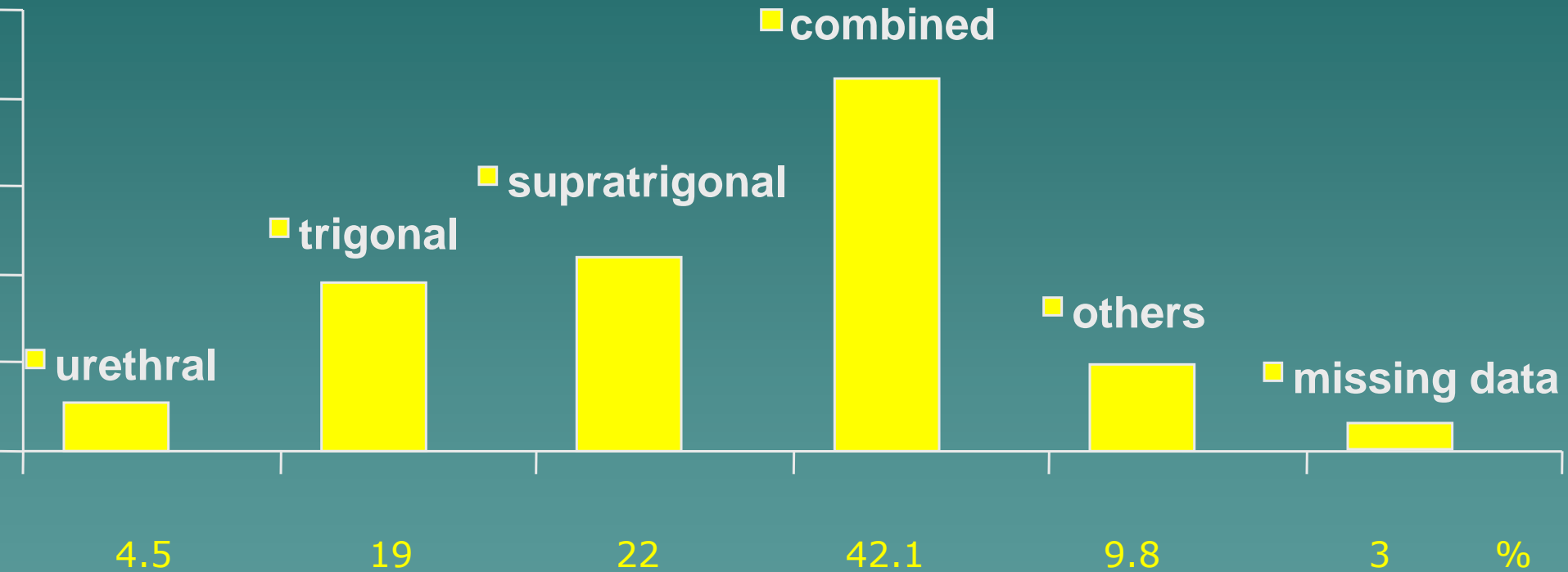
Urethral  
and/or  
Trigonal

79%

Supra-  
trigonal

21%

# Tanguieta personal case series 1996 - 2006



Localisation VVF

# Tanguieta personal case series 1996 - 2006

## Surgical data

- ◆ Route
  - Vaginal 76%
  - Abdominal 18.6%
  - Combined 5.4%
- ◆ Martius graft 31.7%
- ◆ Cutaneous graft 11.9%
- ◆ Urinary diversion 5%
- ◆ Recto-vaginal fistula 4.5%

# Case series 1996 – 2006

## Outcome of Vesico-Vaginal Fistula repair n=179

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