

# Obstetric Fistula

C-H Rochat, MD

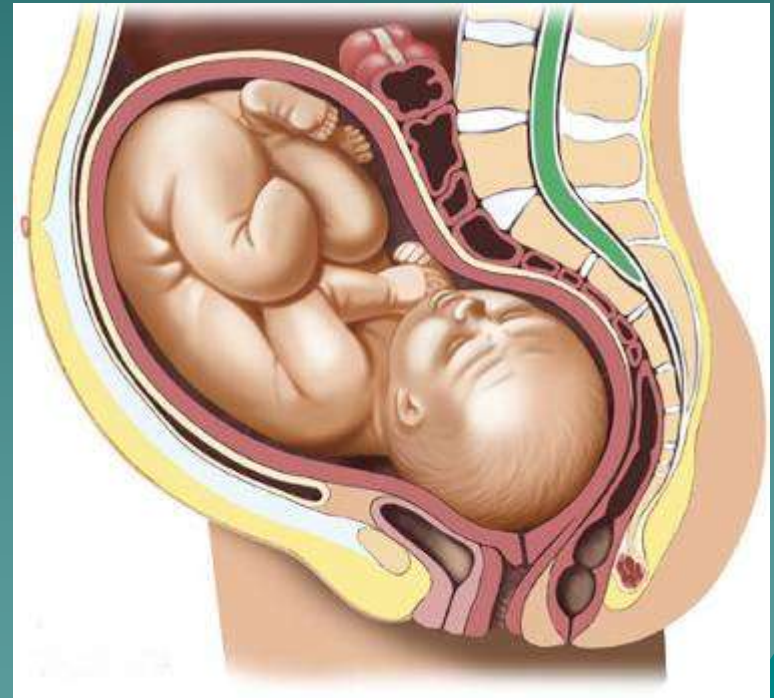
Geneva Foundation for Medical Education  
and Research ([www.gfmer.ch](http://www.gfmer.ch))

Faculty of Health Sciences Cotonou, Benin

Training Course in Sexual and Reproductive Health Research  
Geneva 2011

# 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

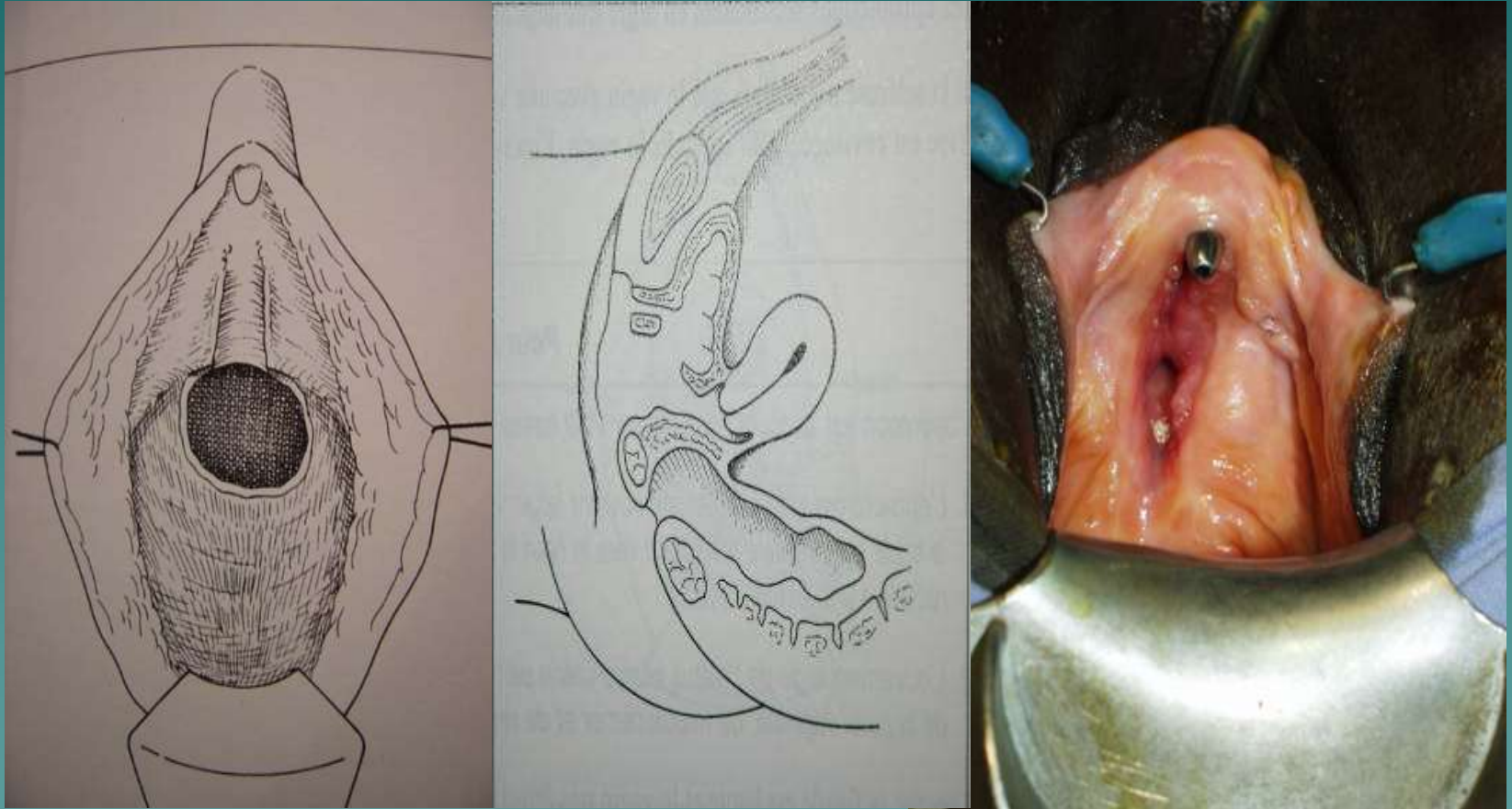
- Non-fibrotic tissue
- Easy to access

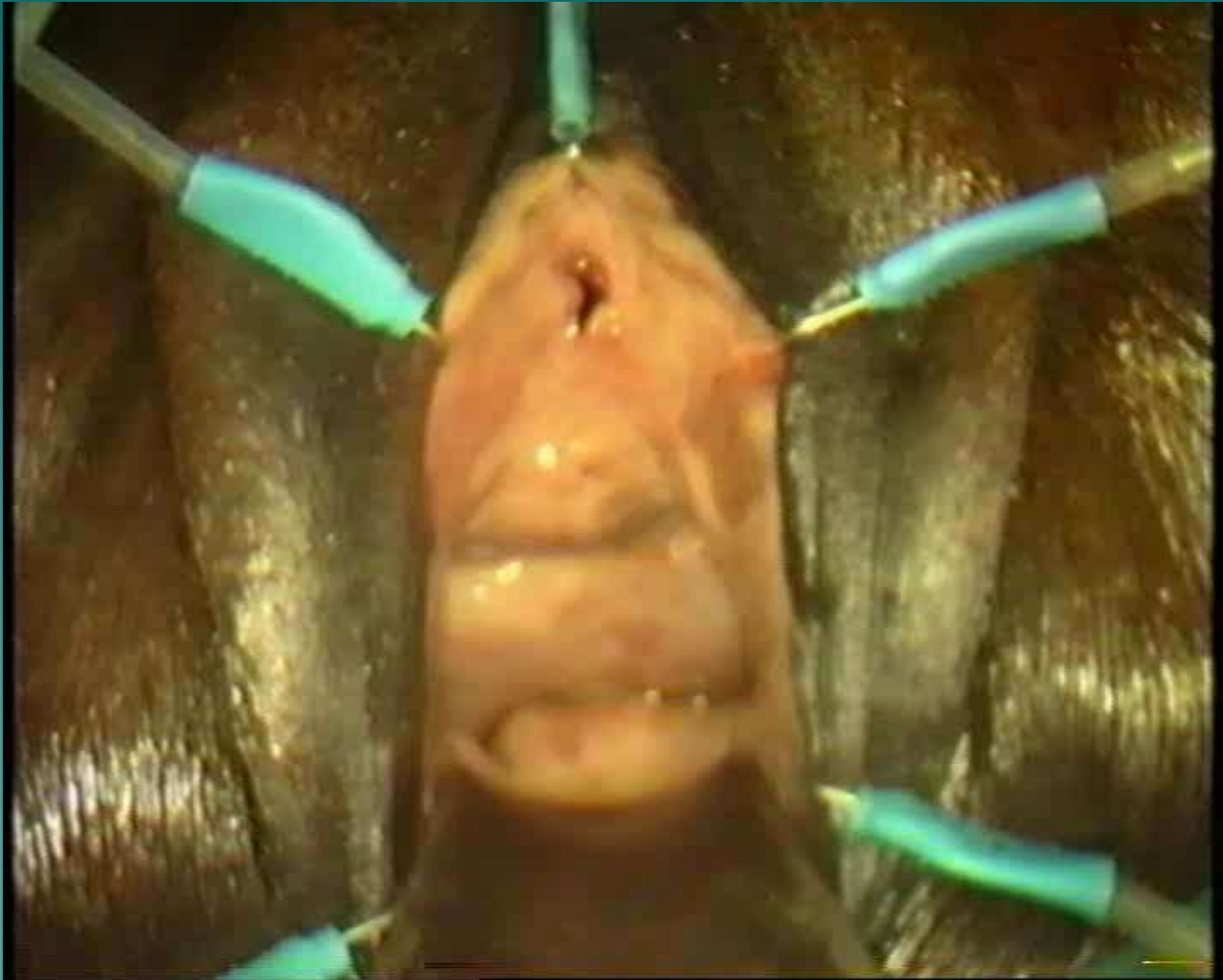
## Complex fistula

- 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)

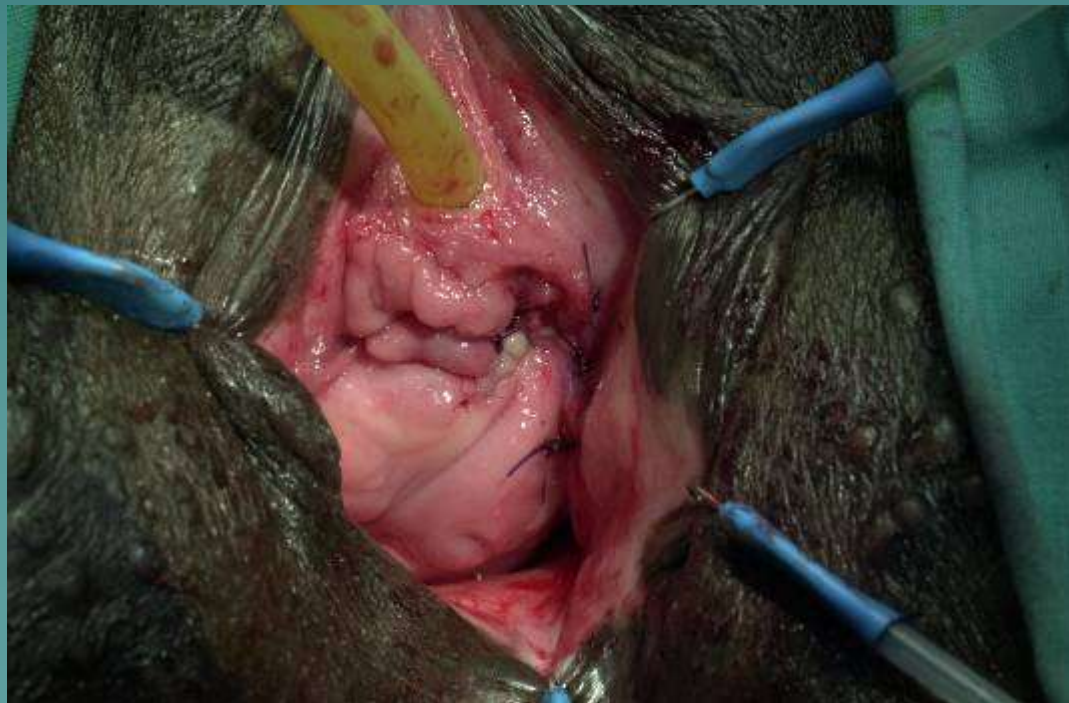
# Surgical tips

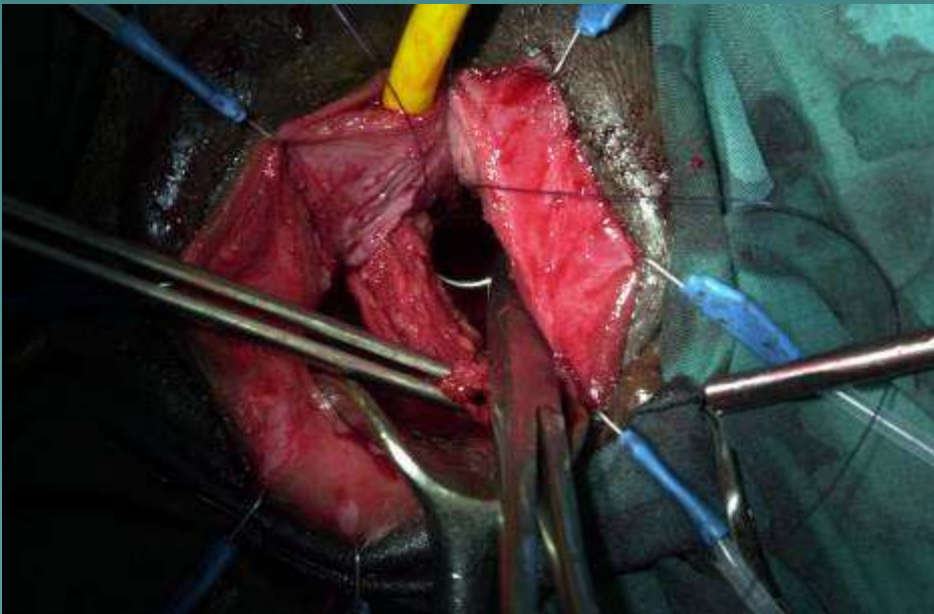
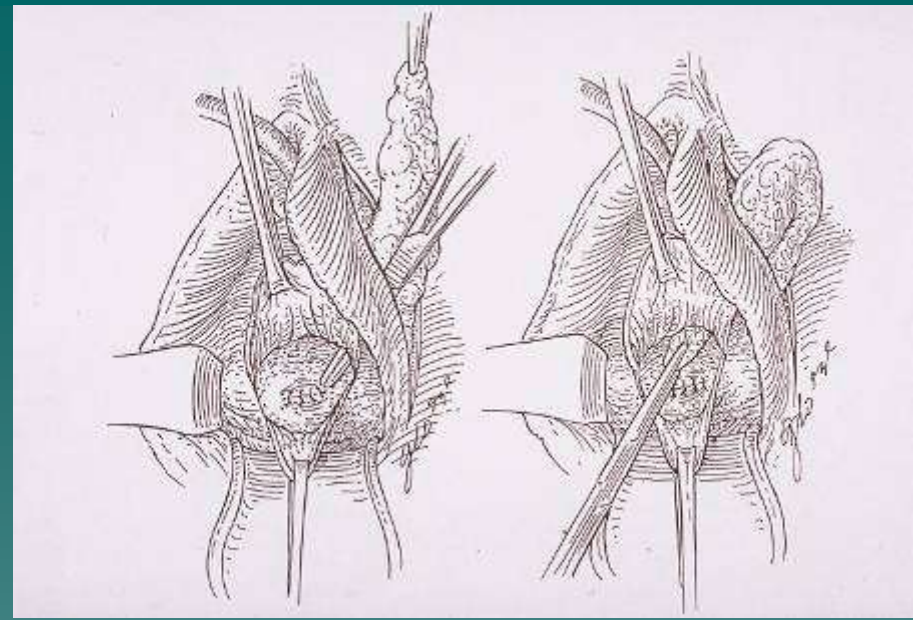
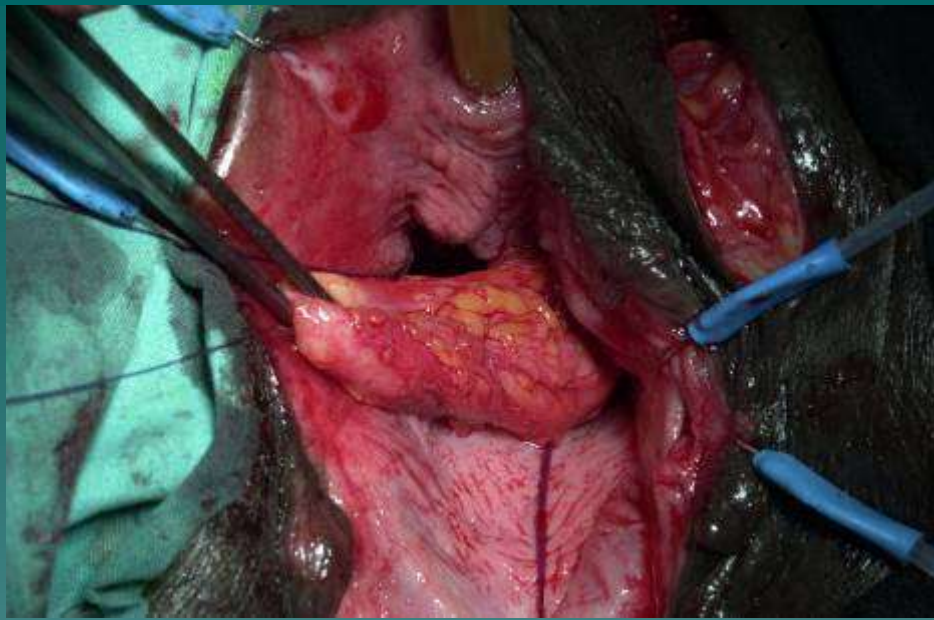
- ◆ Extended Trendelenburg position
- ◆ Scott retractor
- ◆ Headlight
- ◆ Sharp scissors
- ◆ Suture material
  - Post op follow-up
  - Cave: obstructed catheter !





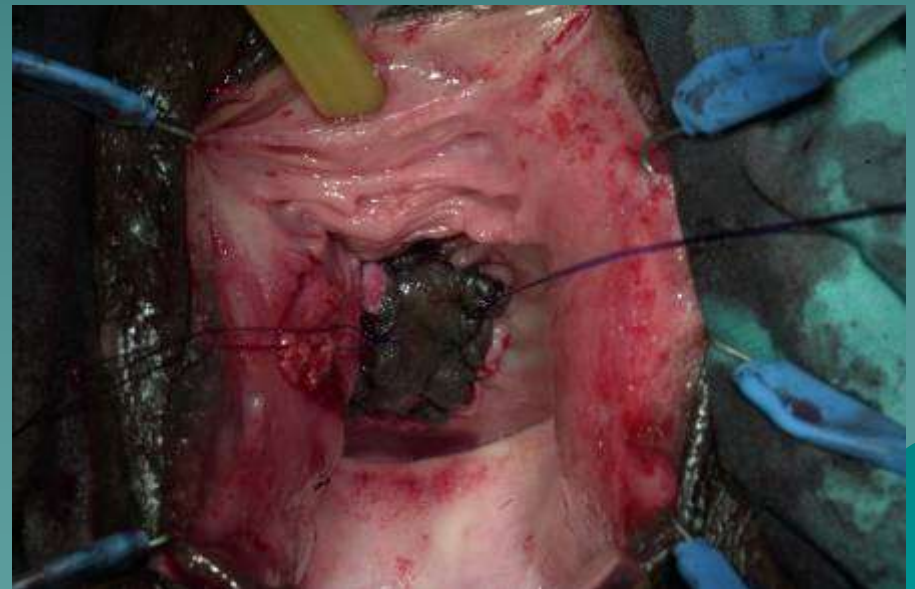
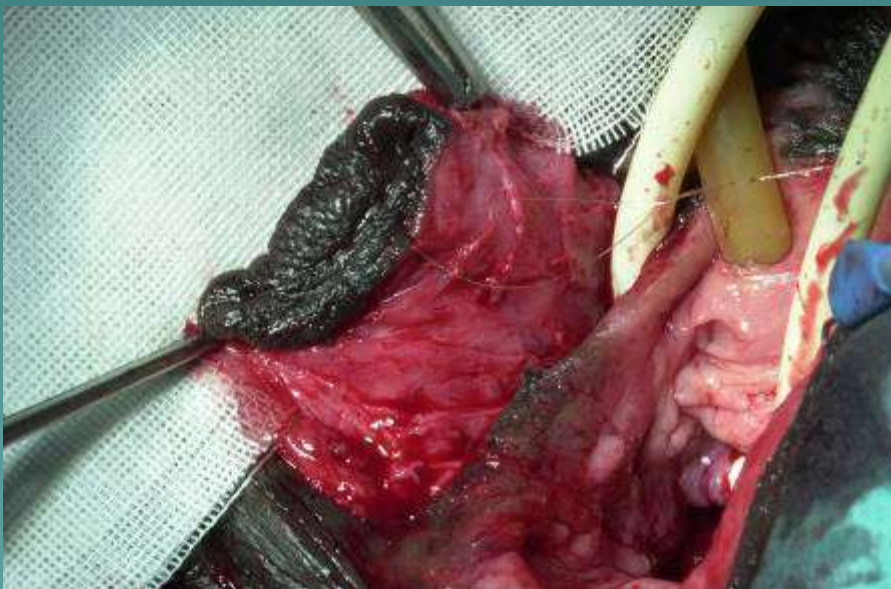
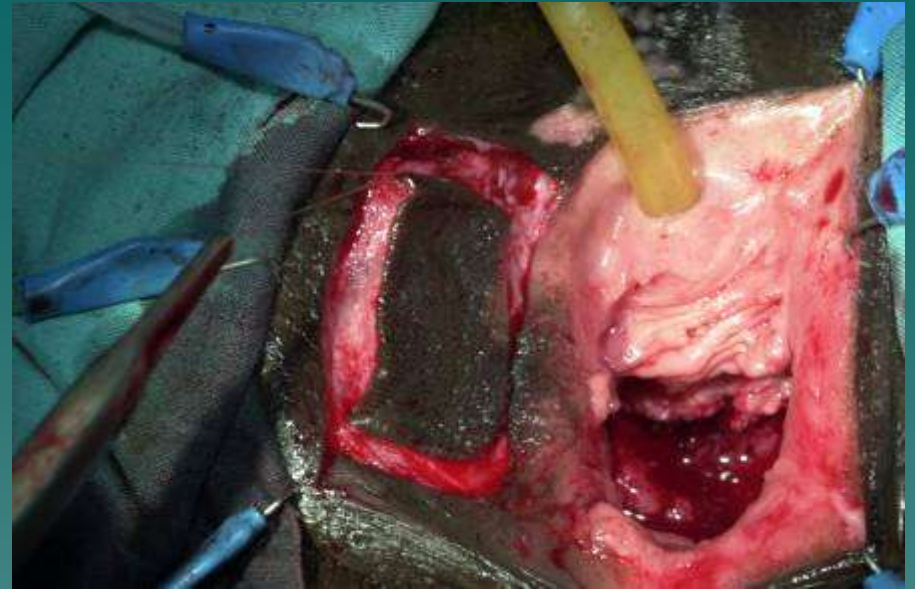
Simple closure





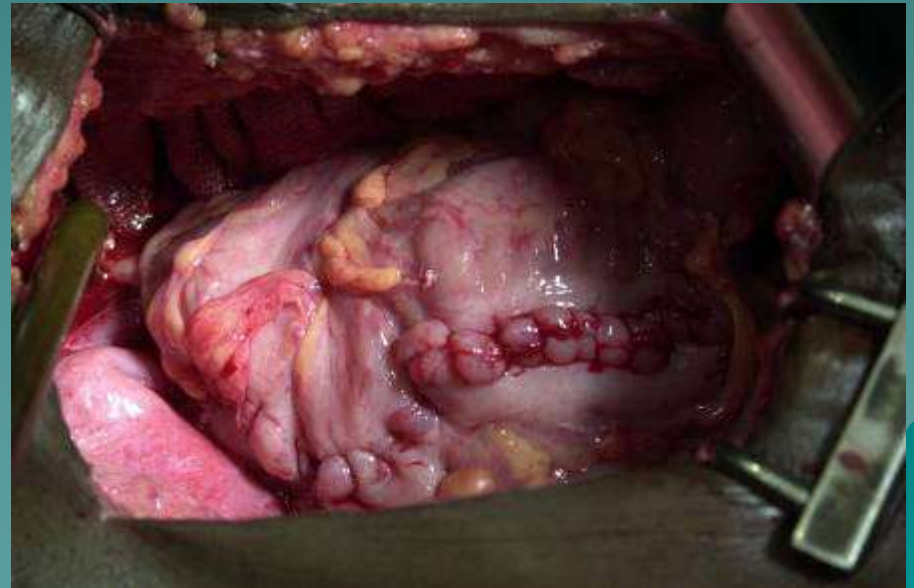
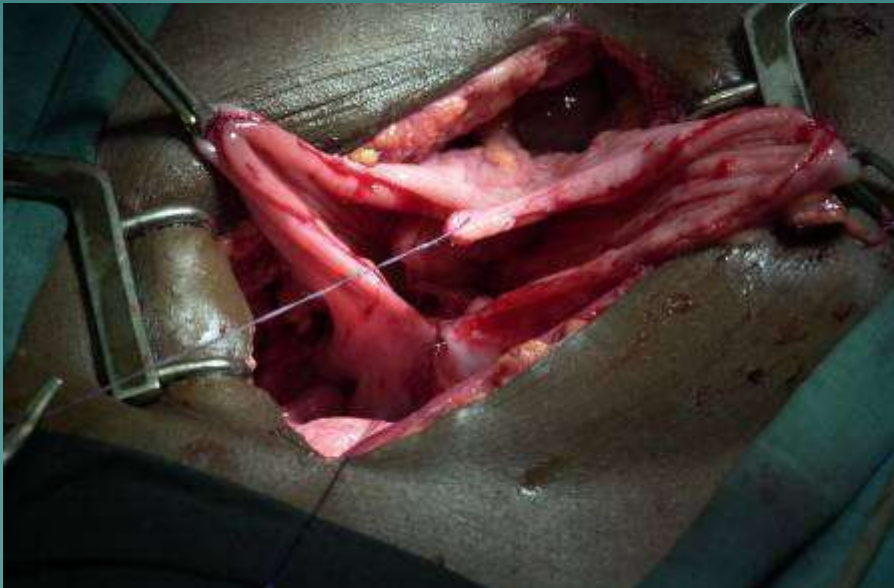
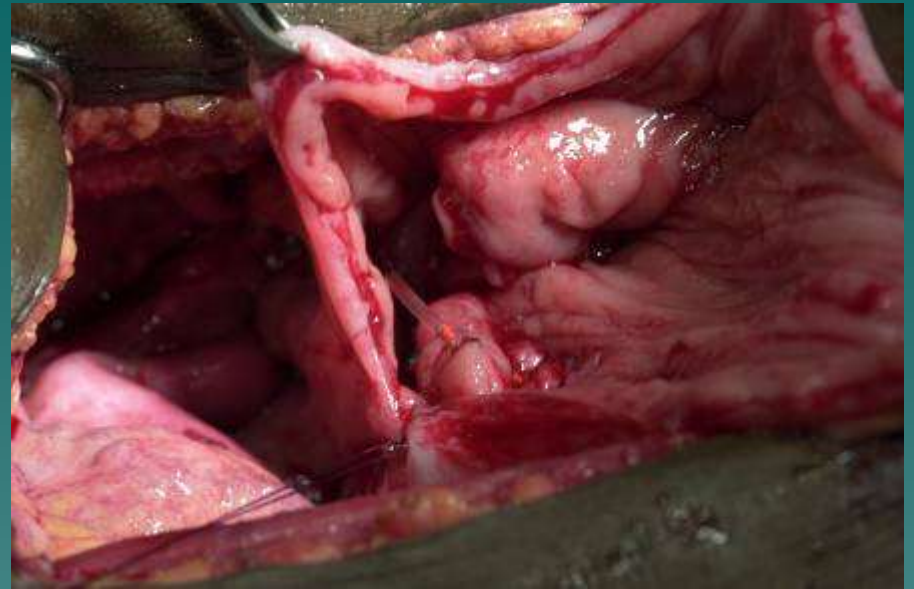
Martius Flap





Symmonds / Falandry



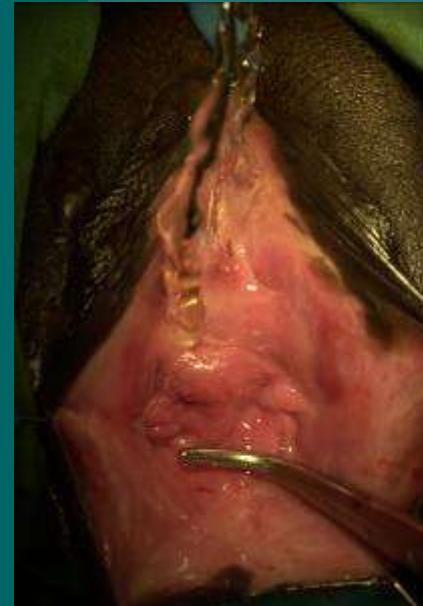


Mayence II



# 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

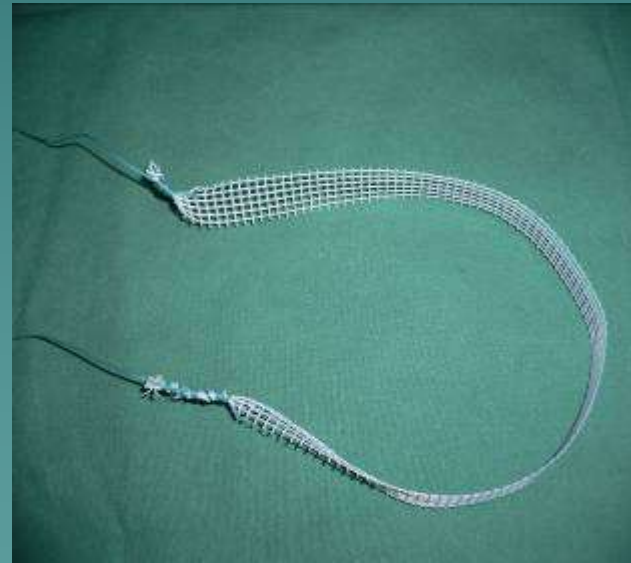
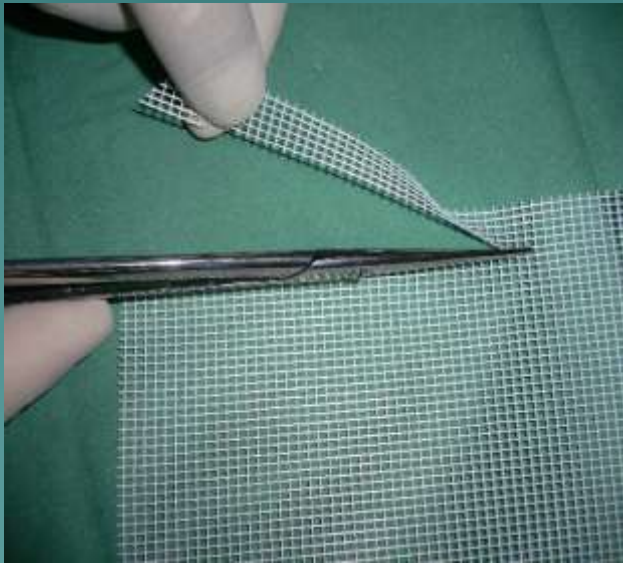
Mopti

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 (Geneva Foundation for Medical Education and Research) database interface. At the top, a navigation bar includes links for Languages, Home, Foundation, Search, Education, Partners, Publications, Databases, Links, and Navigation. Below this, the title 'Fistula' is prominently displayed, followed by a 'Welcome shown' message and a 'log out' link. The 'Instructions' section explains that users should use the tabs at the top of the form to access DATA and NEW-PATIENT elements, and that new cases should be entered as NEW-PATIENT. A dropdown menu shows 'Currently displayed study: Fistula' with a 'click to change' link. Below this, a series of tabs are visible: 'Data', 'New Patient', 'Statistics', 'Resources', and 'Meta'. The 'Admission' tab is currently selected, showing a form with sections A, B, and C. Section A includes a date of data collection field with day, month, and year dropdowns. Section B, 'Identification of the centre', contains dropdowns for 'Code of the centre' and 'Code of the surgeon'. Section C, 'Identification of the patient', includes a 'File number' field and a checkbox for 'Previous hospitalization 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



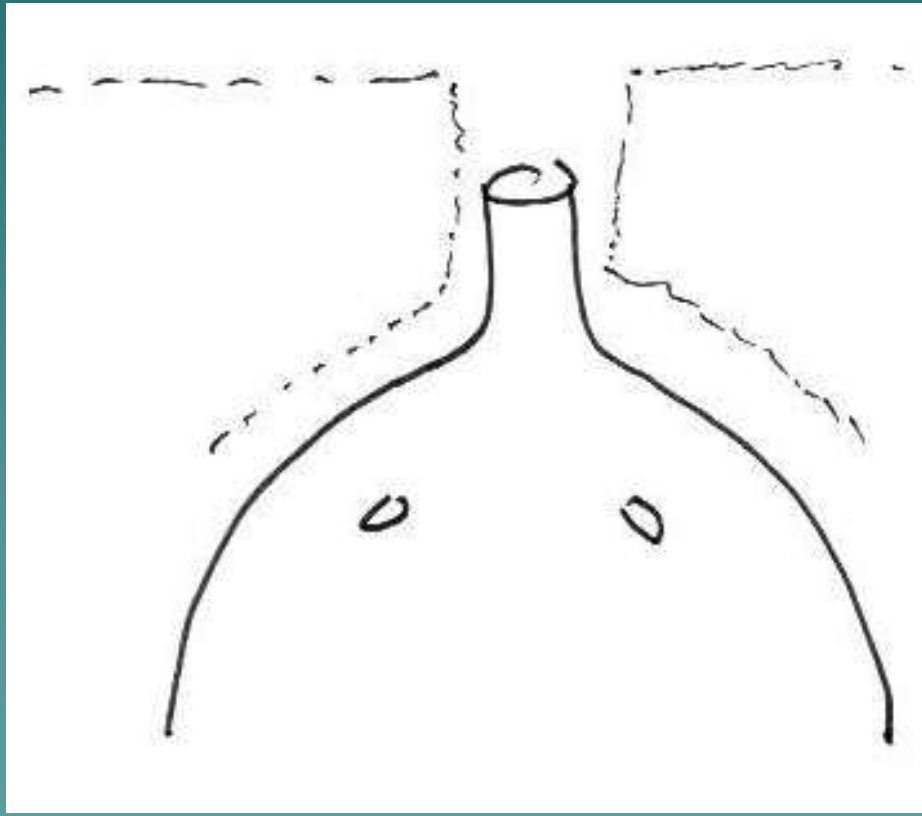
# Tanguieta personal case series 1996 - 2006

Baseline data		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

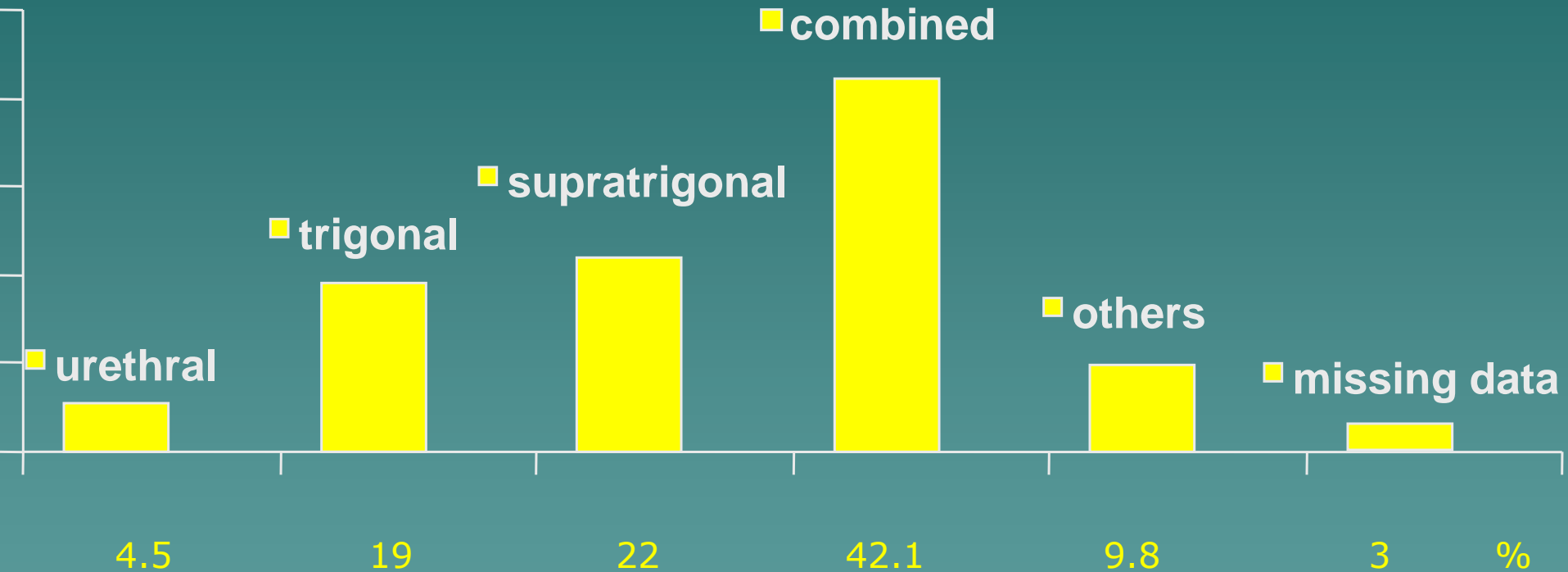
79%

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