

Obstetric Fistula

The model of Tanguieta

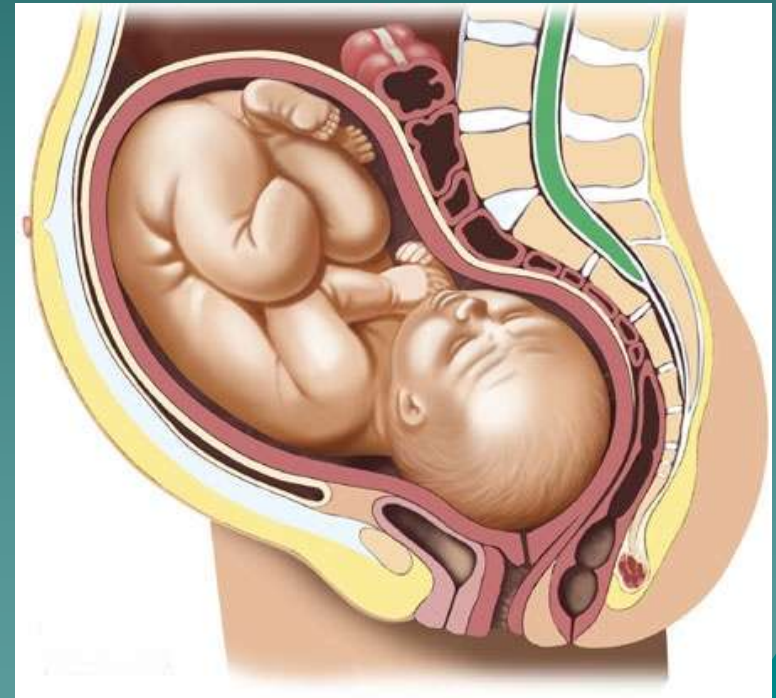
C-H Rochat, MD

Geneva Foundation for Medical
Education and Research
(www.gfmer.ch)

Faculty of Health Sciences Cotonou,
Benin

Definition

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



Problem

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



Prevalence

- ◆ Estimated : 2 -10 million women worldwide
- ◆ Africa, Asia, South America
 - Sub-Saharan Africa: 2/1000 deliveries



Classification

Simple fistula

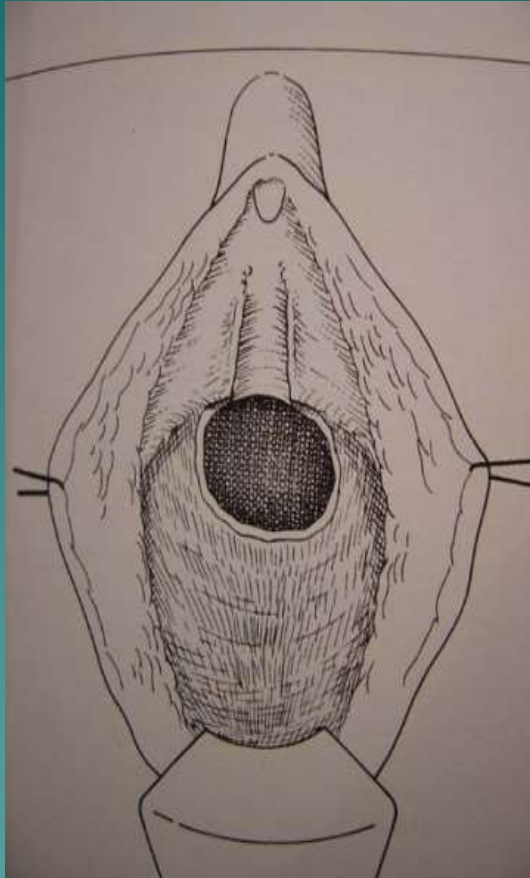
- Non-fibrotic tissue
- Easy to access

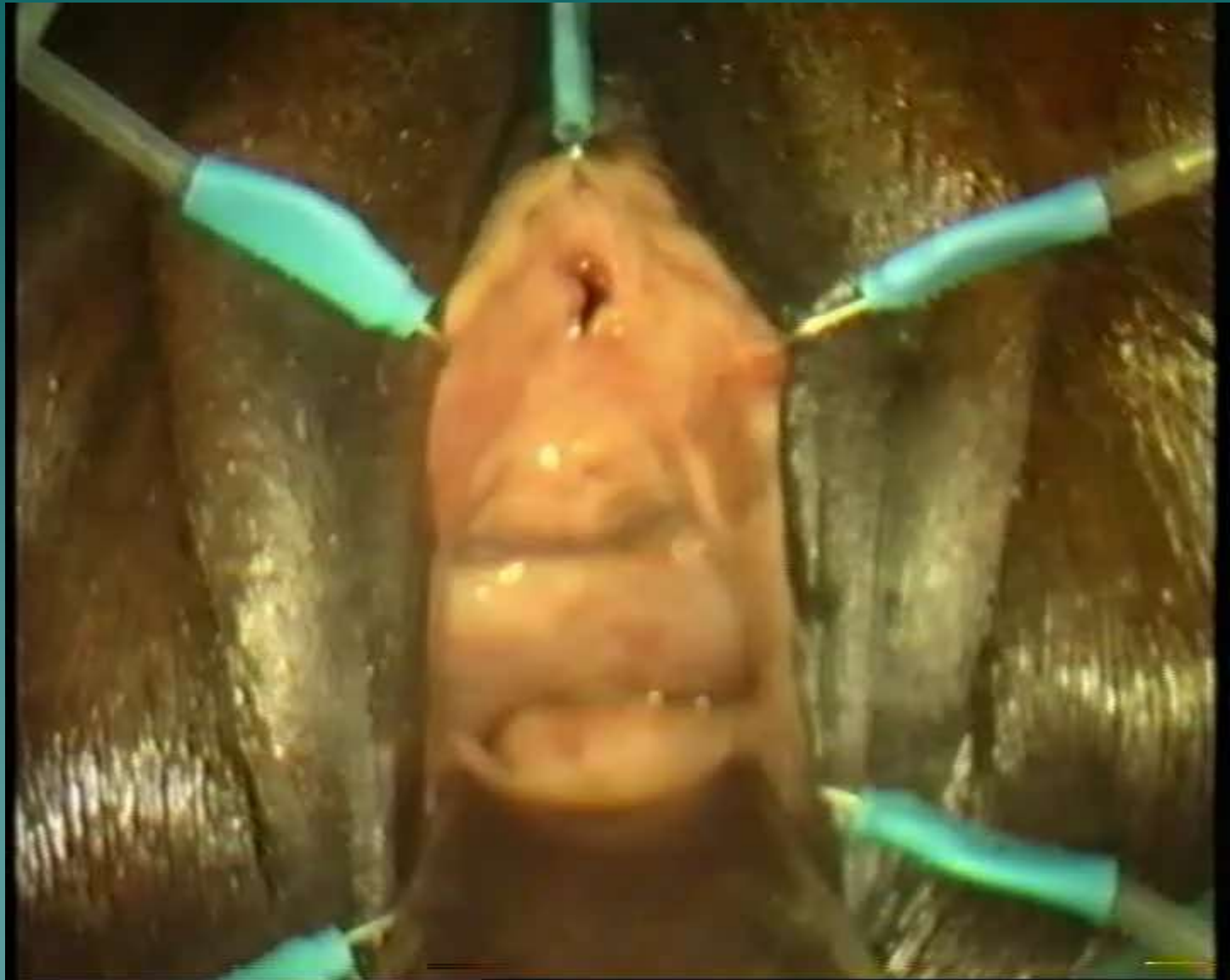
Complex fistula

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



Complex VVF





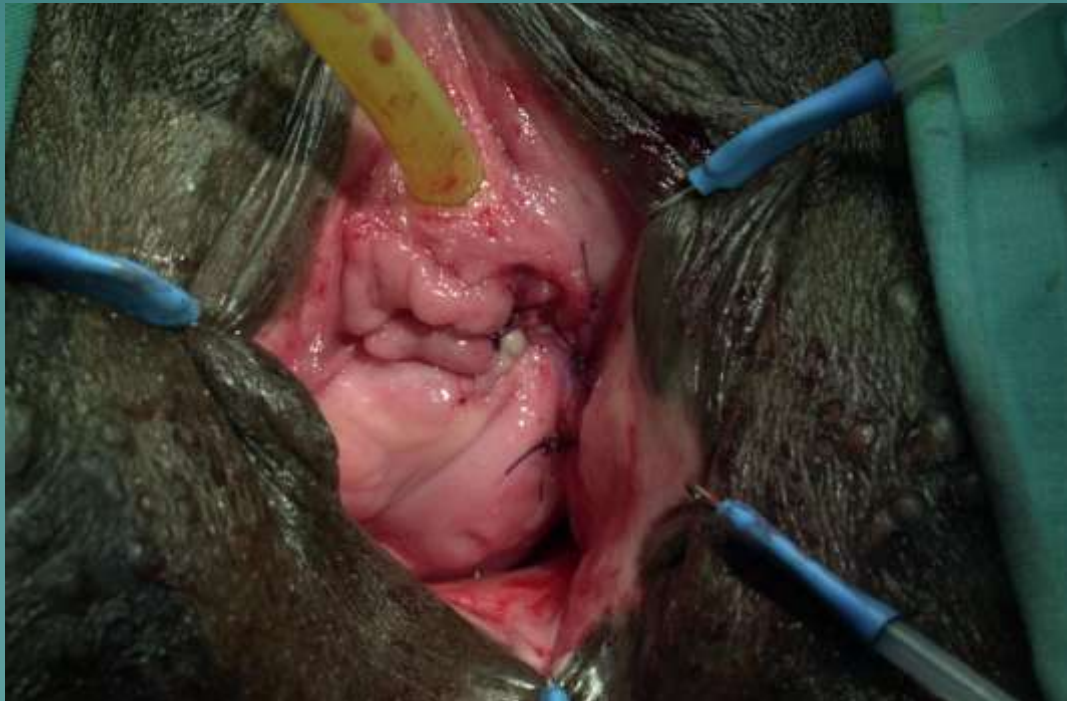
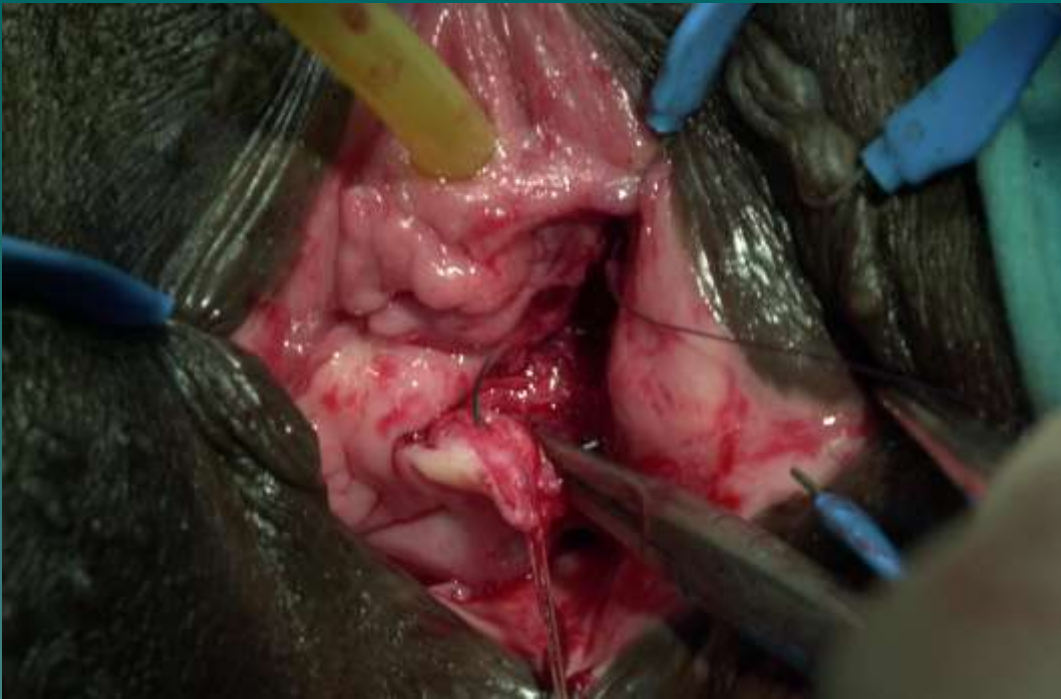
http://www.gfmer.ch/Video/Extrait_fistules.wmv

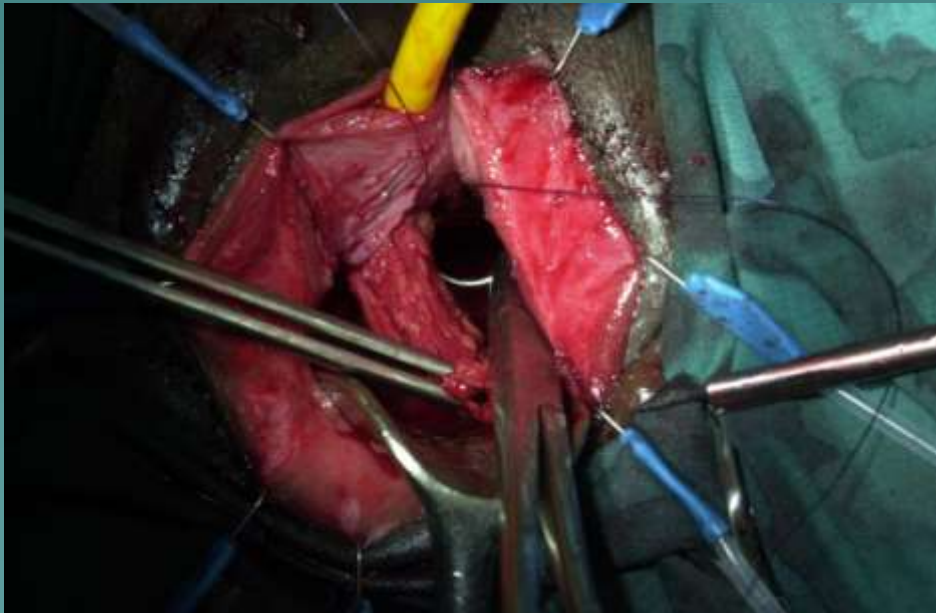
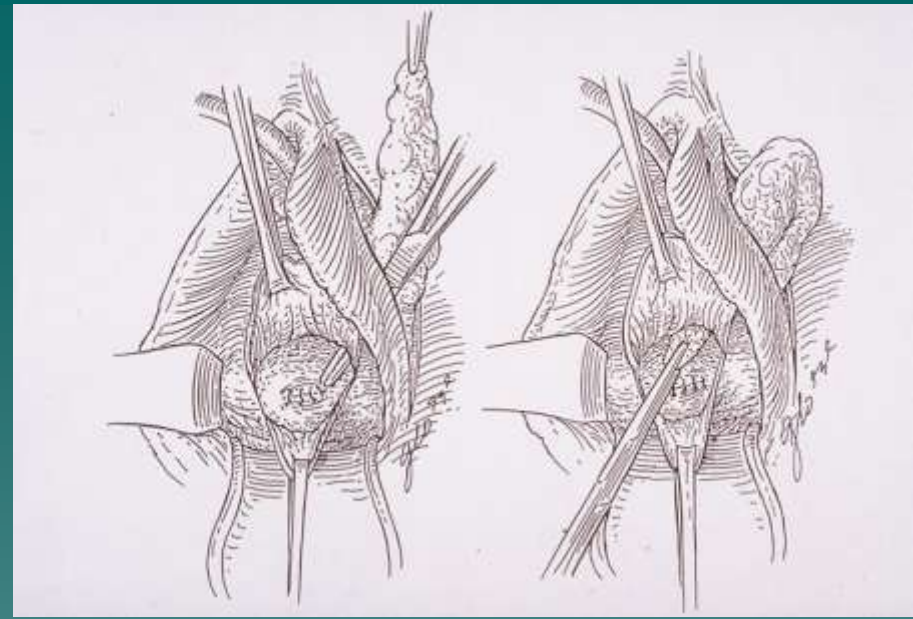
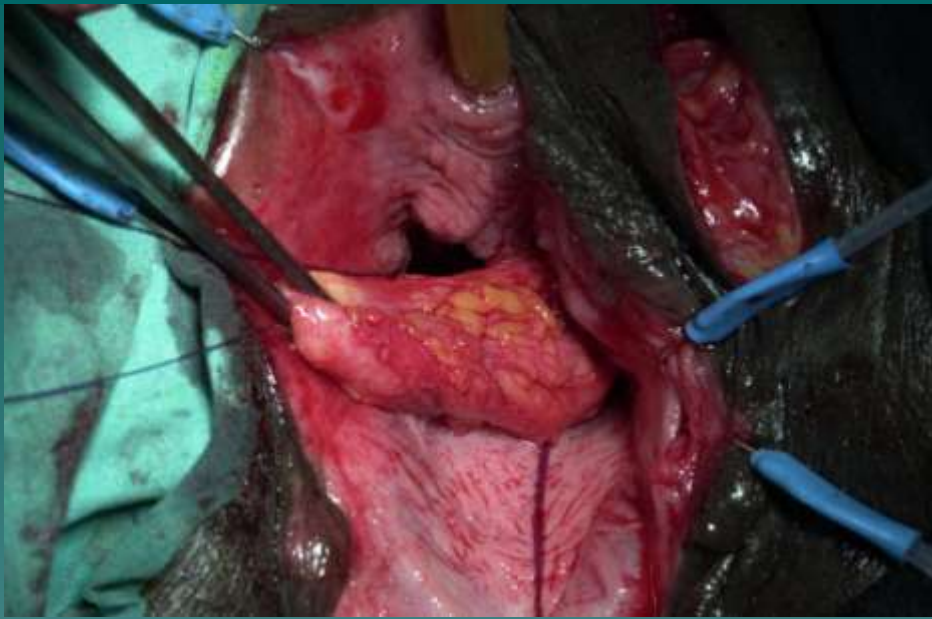
Surgical tips

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

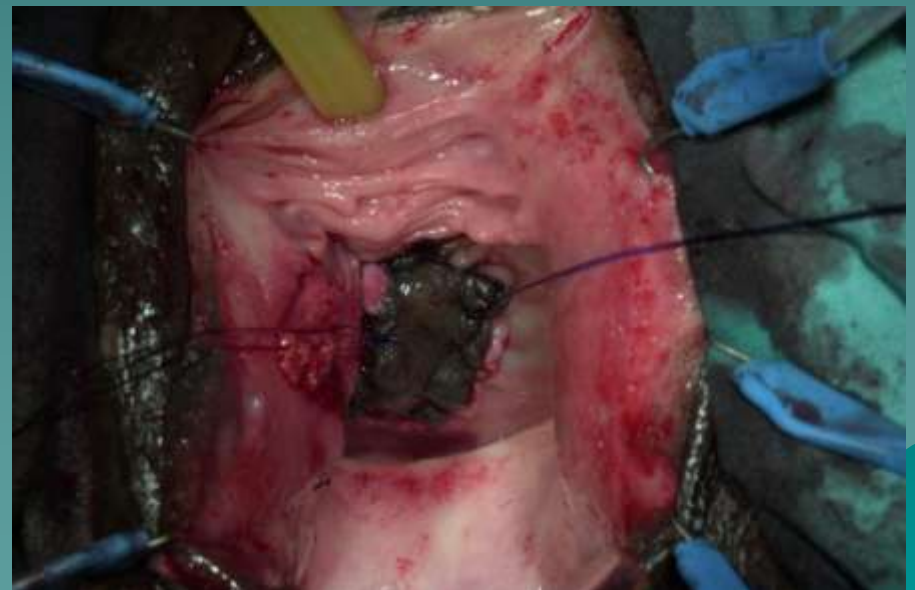
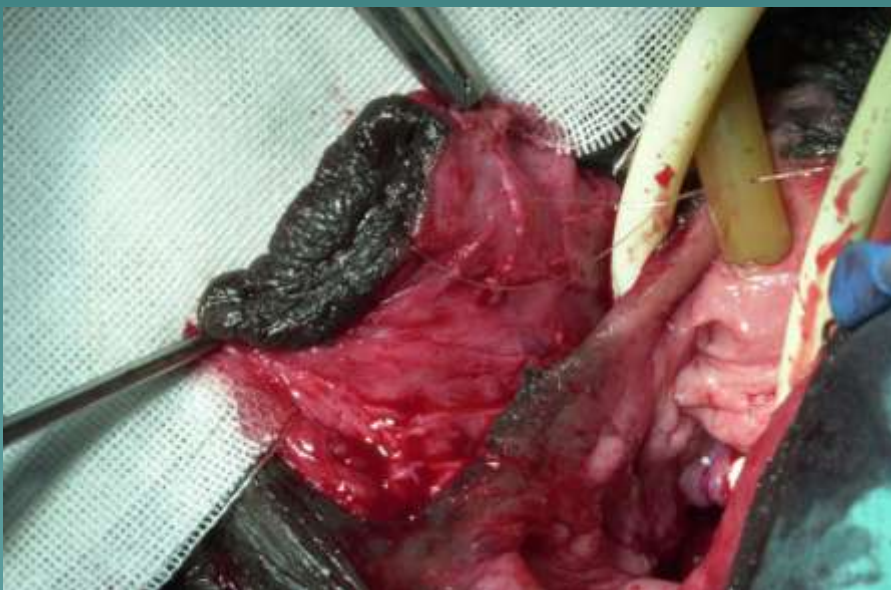
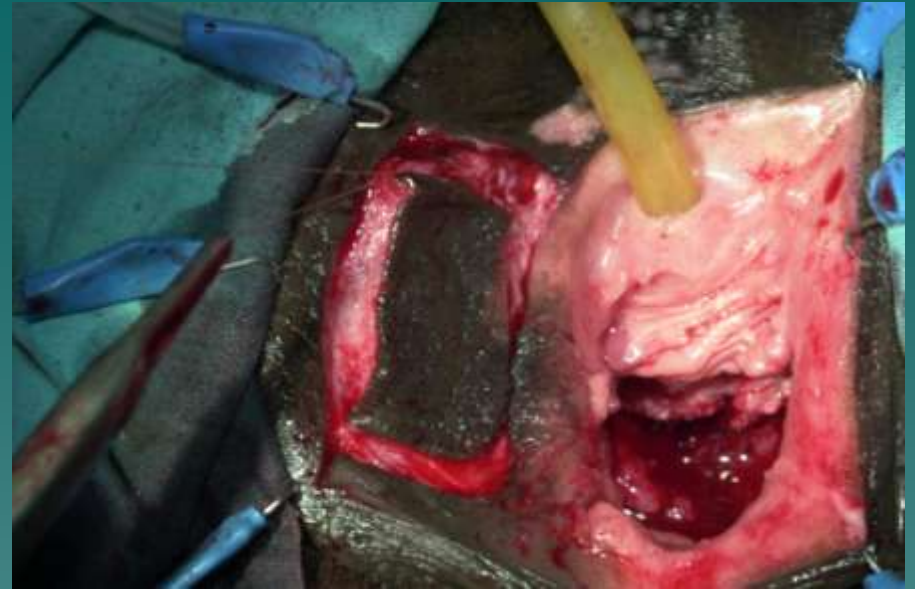


Simple closure

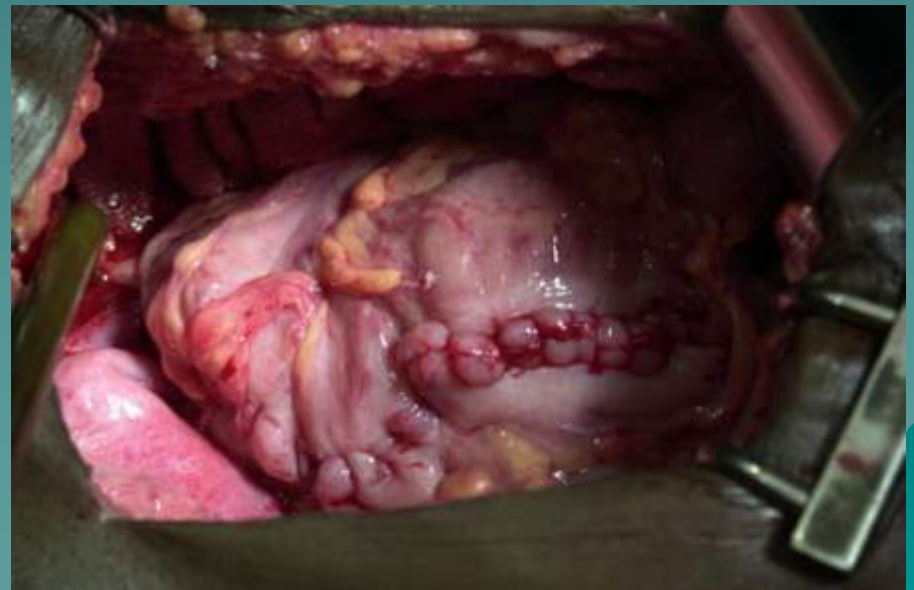
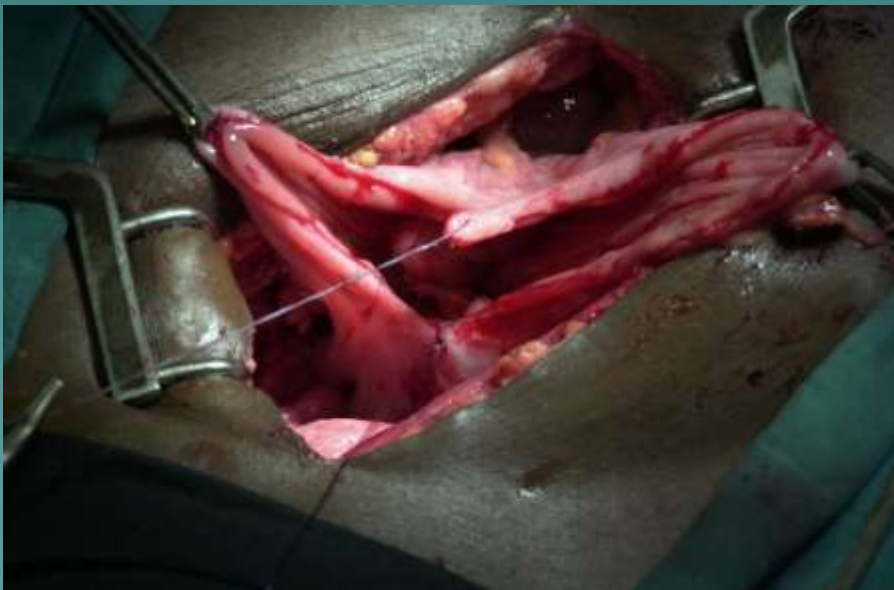
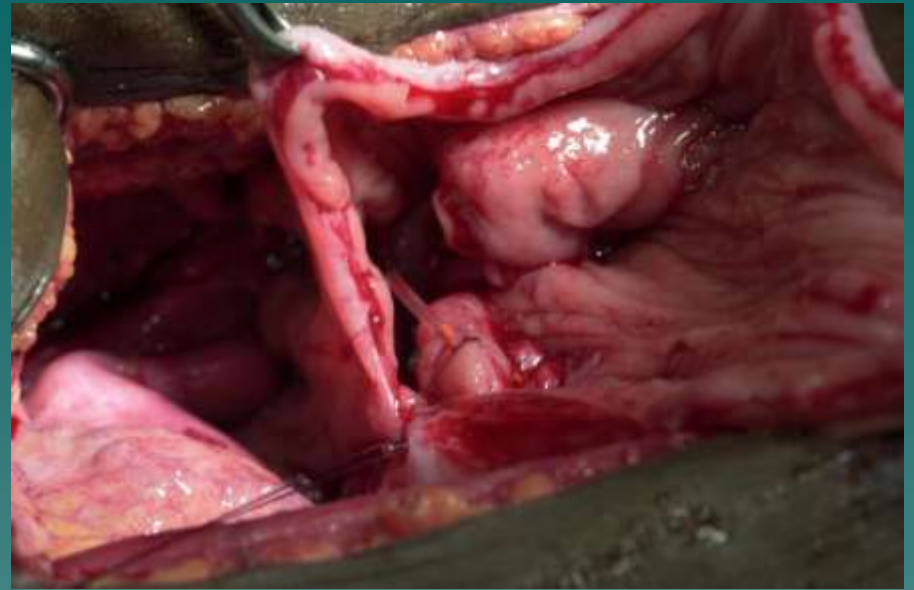




Martius Flap



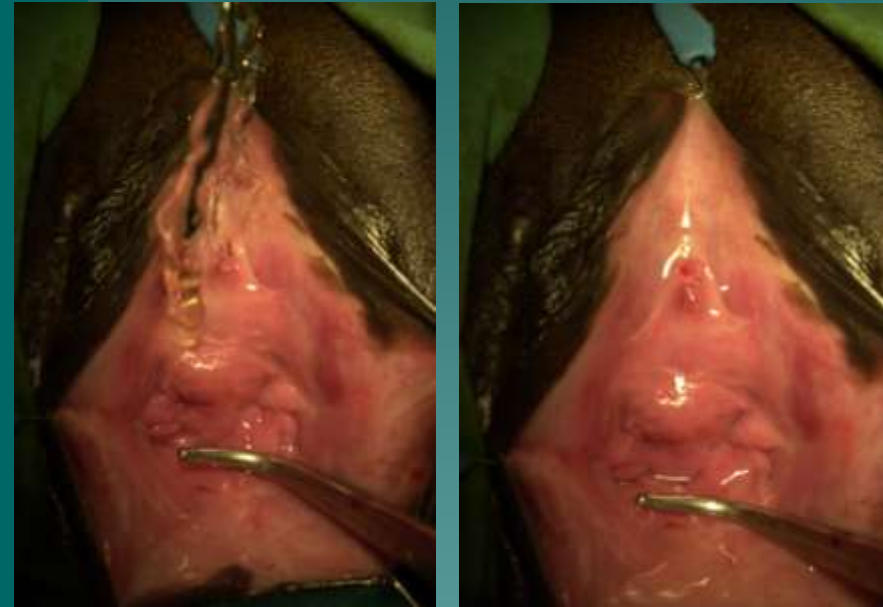
Symmonds / Falandry



Mayence II

Stress incontinence

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



For experts and motivated surgeons



**Reconstruction
cervico-urétrale complexe**

http://www.gfmer.ch/Video/Reconstruction_cervico-uretrale.wmv

African tape TVT / TVTO

2001

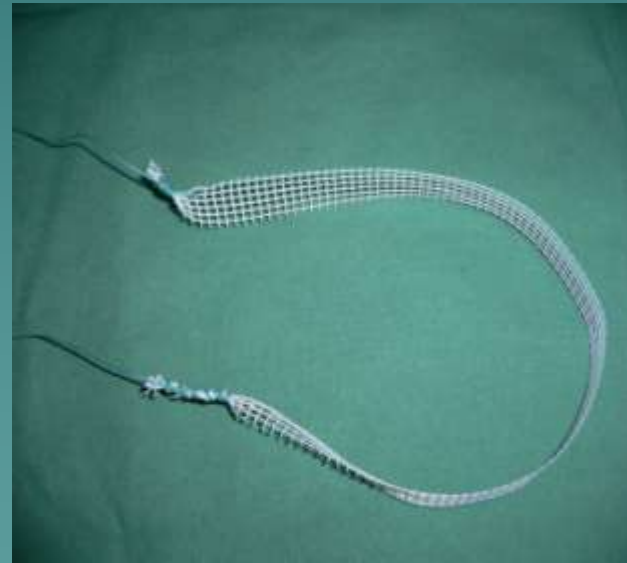
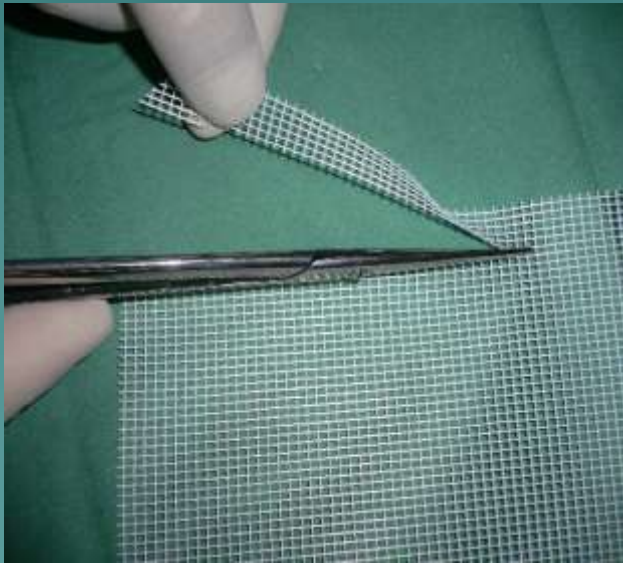
Mopti

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 Language, 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 'Currently displayed study' dropdown menu is set to 'Fistula'. A navigation bar includes 'Data', 'New Patient', 'Statistics', 'Resource', and 'Meta'. The 'Admission Form' is divided into sections: 'A. Date of data collection' with fields for day, month, and year; 'B. Identification of the centre' with dropdowns for 'Code of the centre' and 'Code of the surgeon'; and 'C. Identification of the patient' with a field for 'File number' and a checkbox for '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 - 2007

- ◆ Hospital northern Benin
- ◆ 14 surgical missions since 1993
- ◆ Since 1996 specific visits for surgical fistula repair

- ◆ obstetric fistulae
N = 231

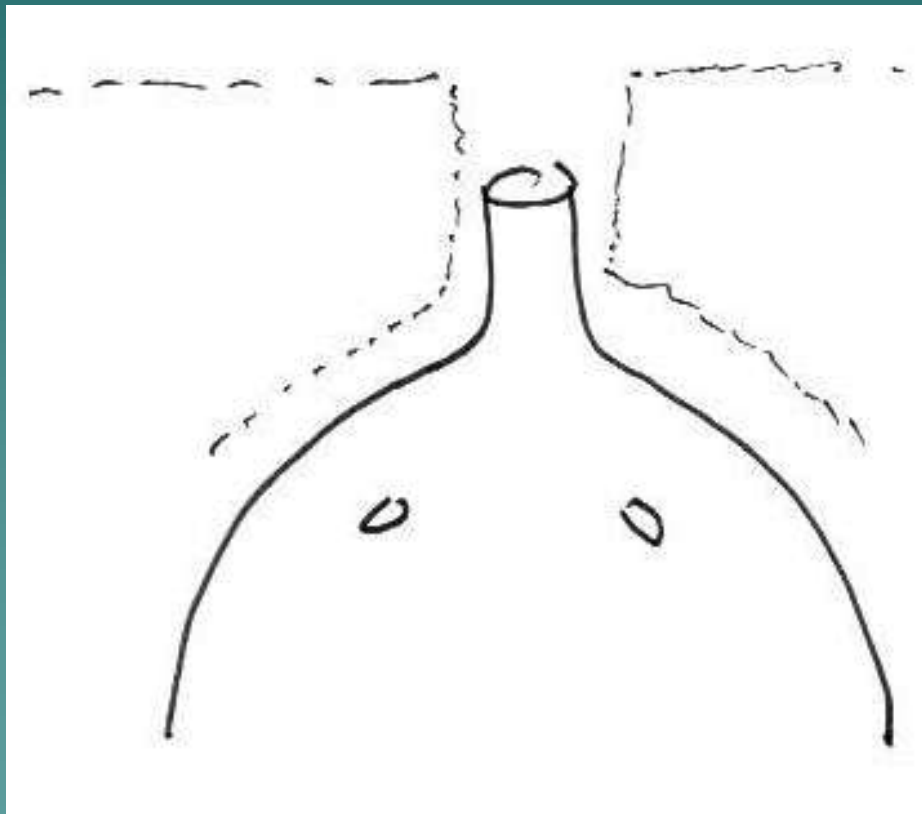
Tanguieta personal case series 1996 - 2006

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%
- ◆ Sectio rate: 40%
- ◆ Maternal mortality?

Tanguieta personal case series 1996 - 2006



Localisation VVF

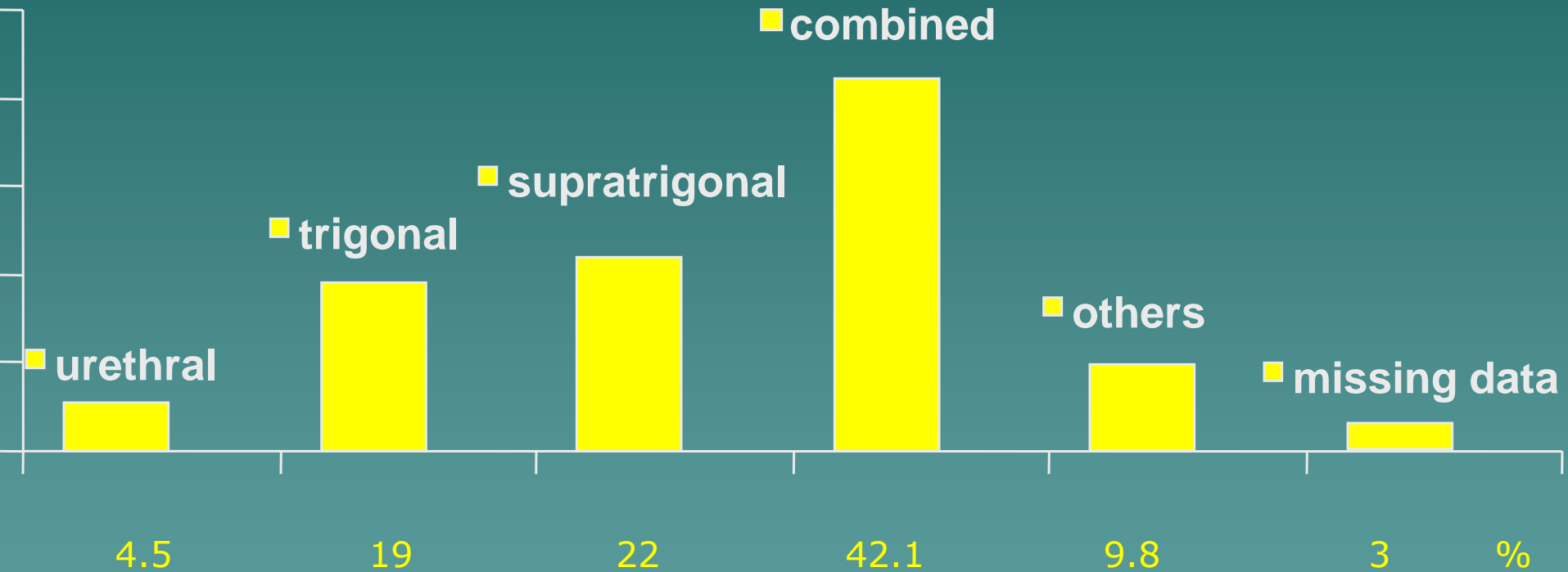
Urethral
and/or
Trigonal

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