# Obstetric Fistula in Developing Countries: What Did I Learn in 25 years of Practice?

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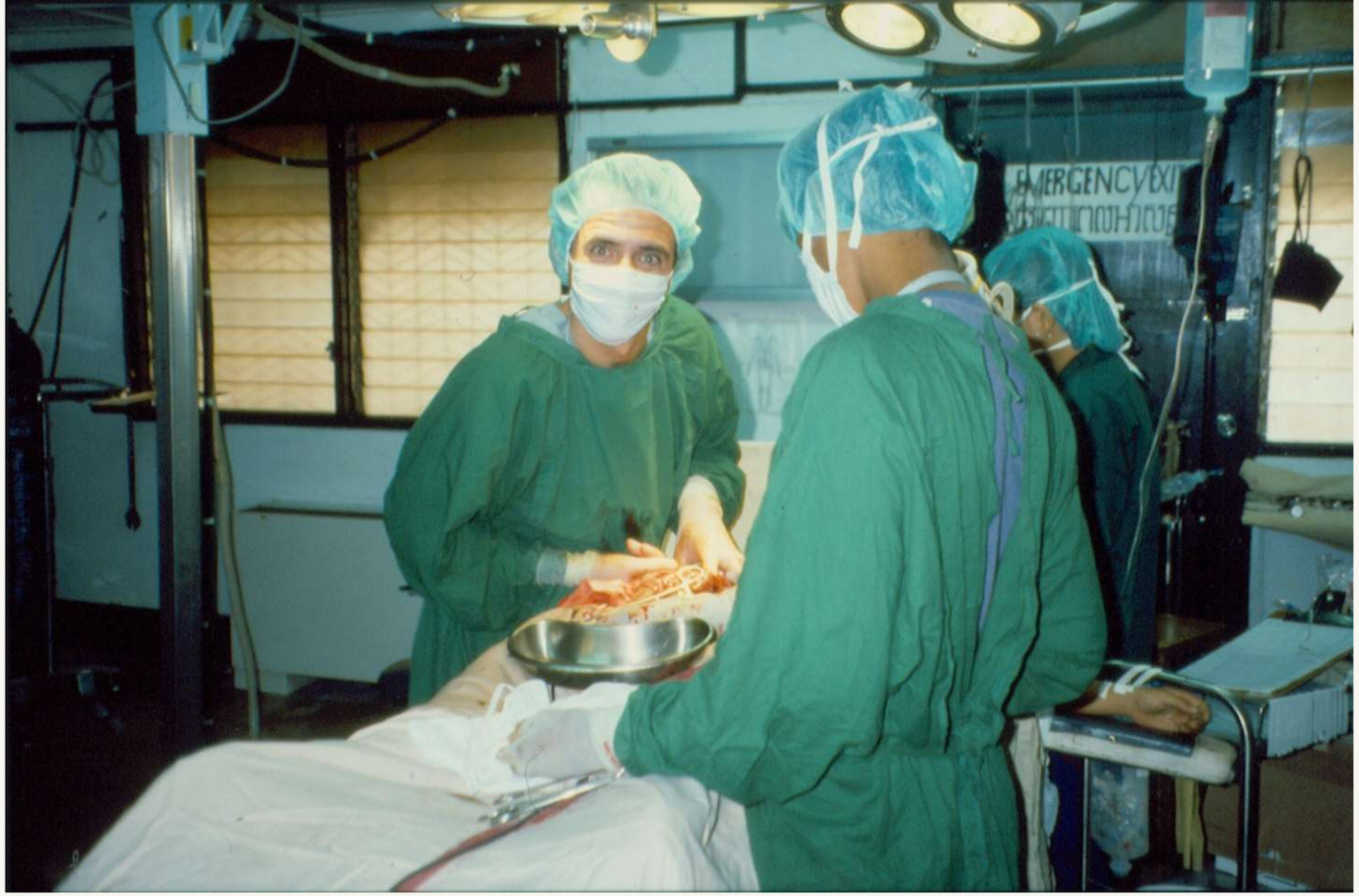
11.11.22




# An Early Commitment :

- In Pakistan
- In Afghanistan
- On the Cambodian border
- In Iraq

# Obstetric Fistula : Pathology of the Poor Woman

2 million
women in the world

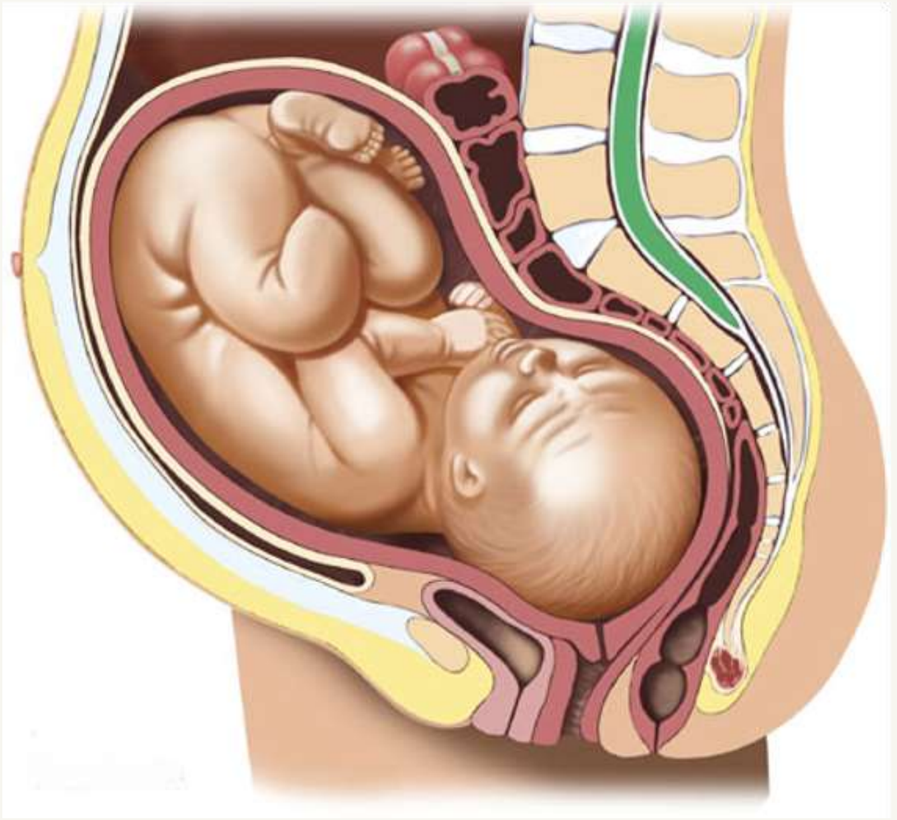
Mainly in Africa and Asia
More generally in poor countries

A taboo pathology

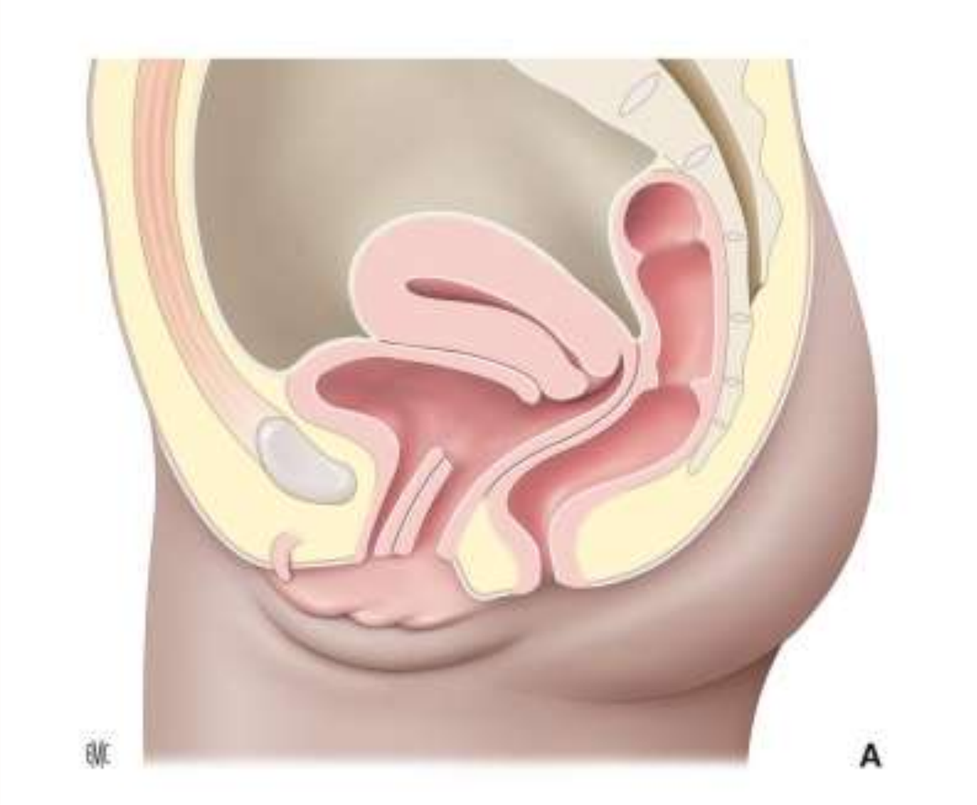

# Discovery of Obstetric Fistula with Frère Florent in Tanguiéta

# Obstetric Fistula

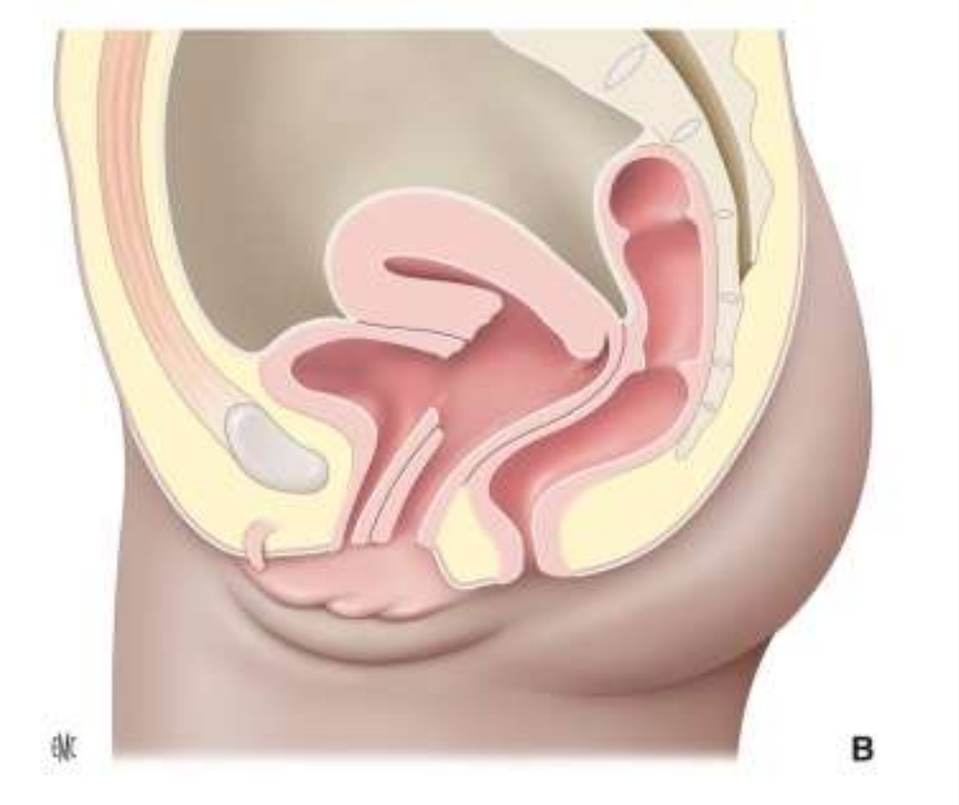
- Fetopelvic disproportion
- Delayed access to Cesarean Section
- Tissue necrosis due to compression
- Iatrogenic lesions



# Vesico–vaginal fistula




# Juxta–cervical fistula

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# Juxta-urethral fistula

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# Circonferential fistula

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# The Obstructed Labor Injury Complex

- VVF/VRF
- Stress incontinence
- Vaginal scars
- Infertility

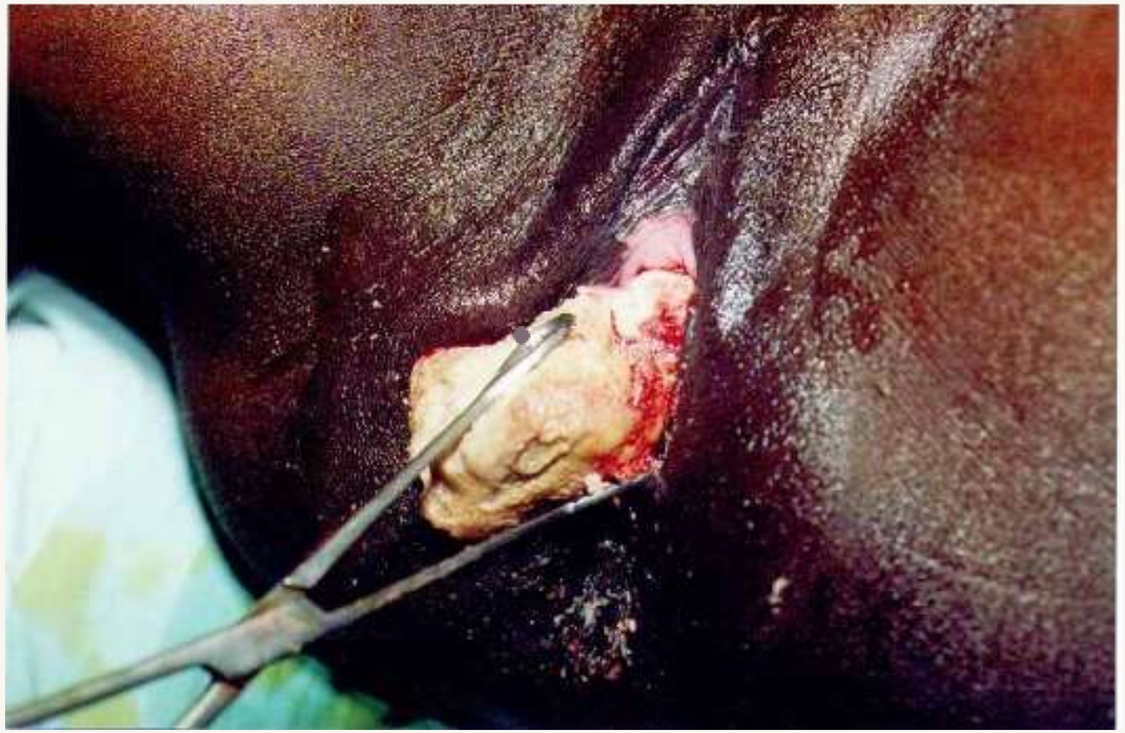
# Medical and Social Problems Associated with OF

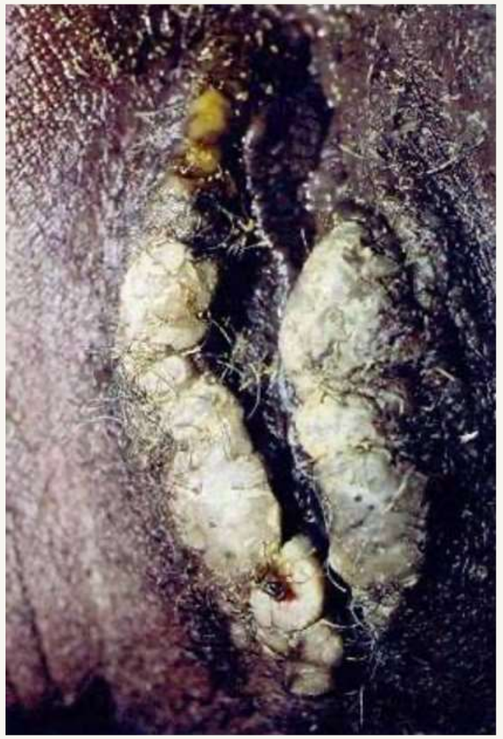
- Family Abandonment
- Co-morbidity :

  -Infections

  -Bladder Stones

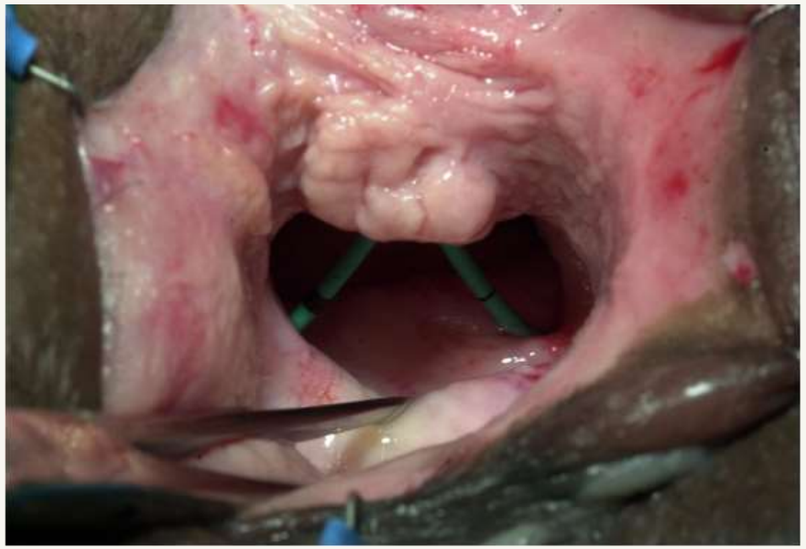
  -Infertility





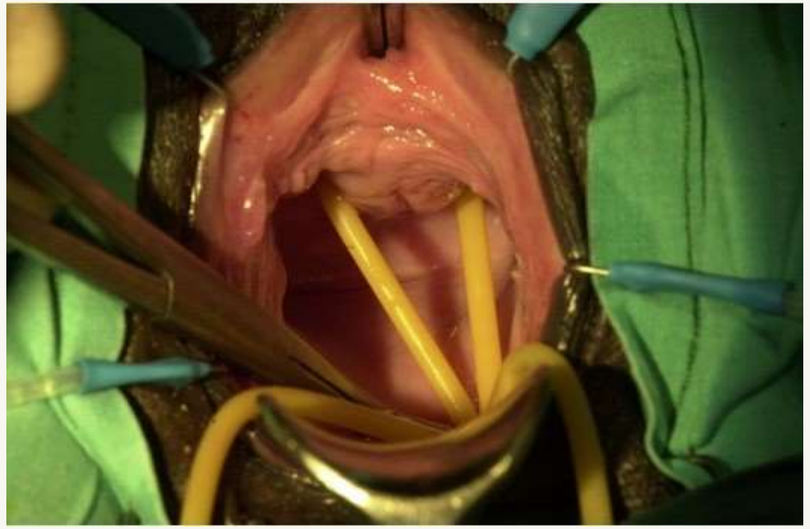
## Simple fistula

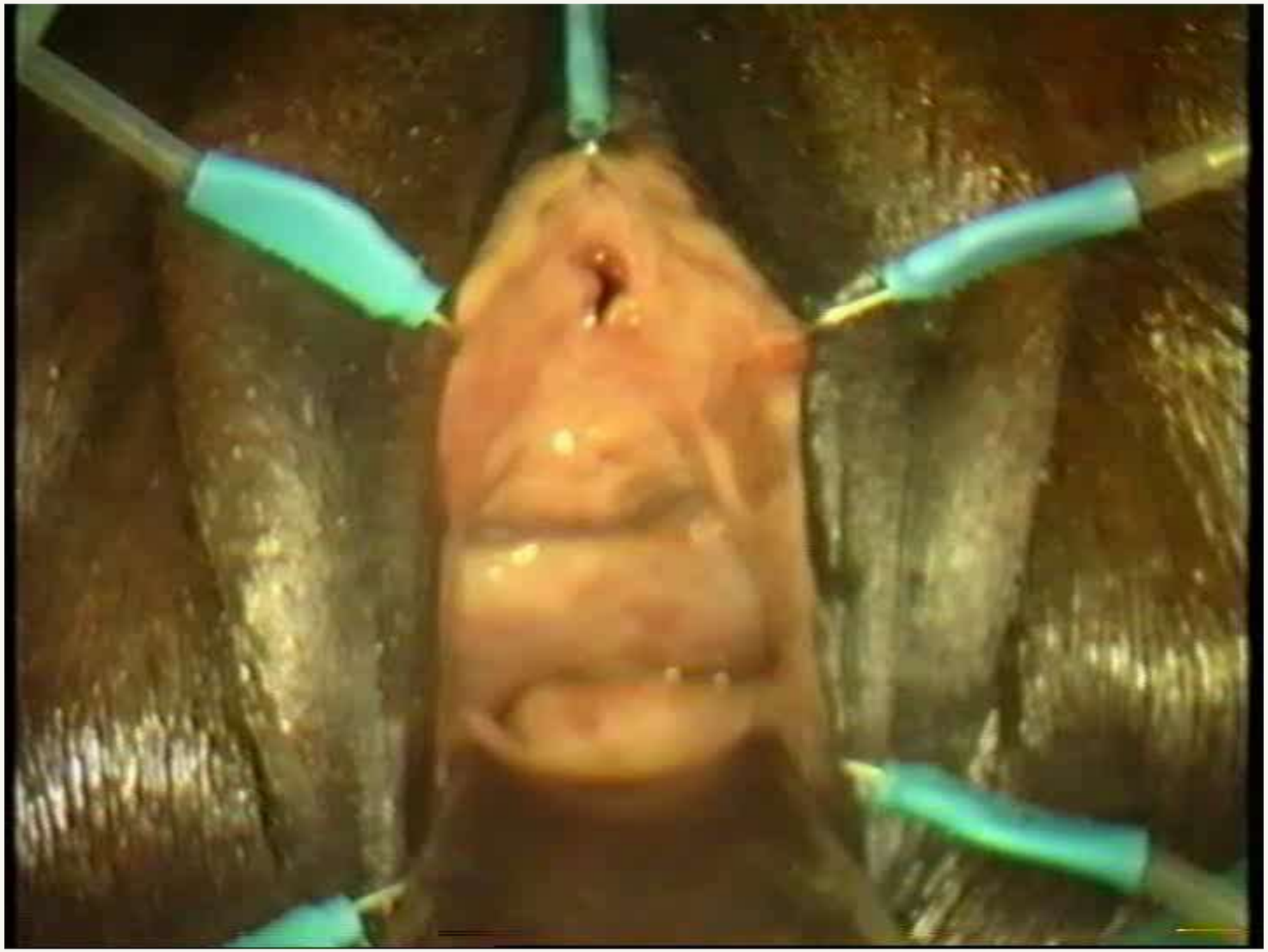
- Soft tissue
- Easy access



## Complicated fistula

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

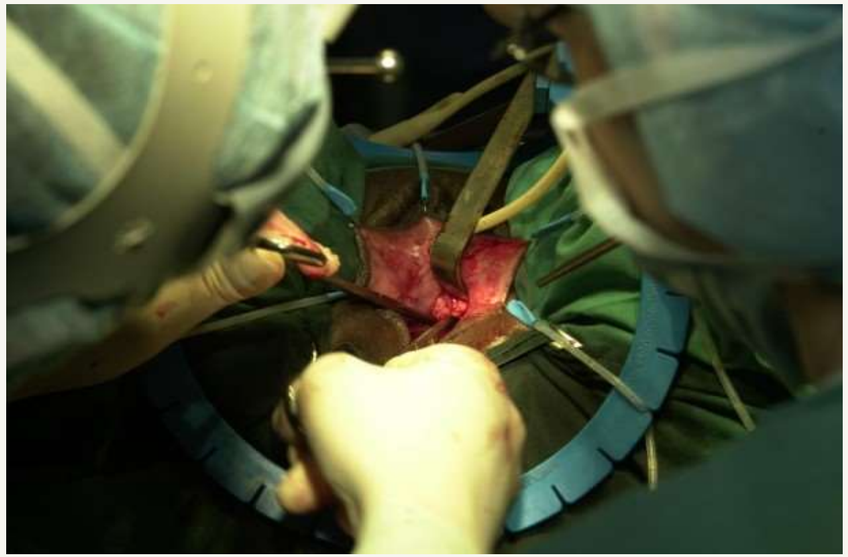


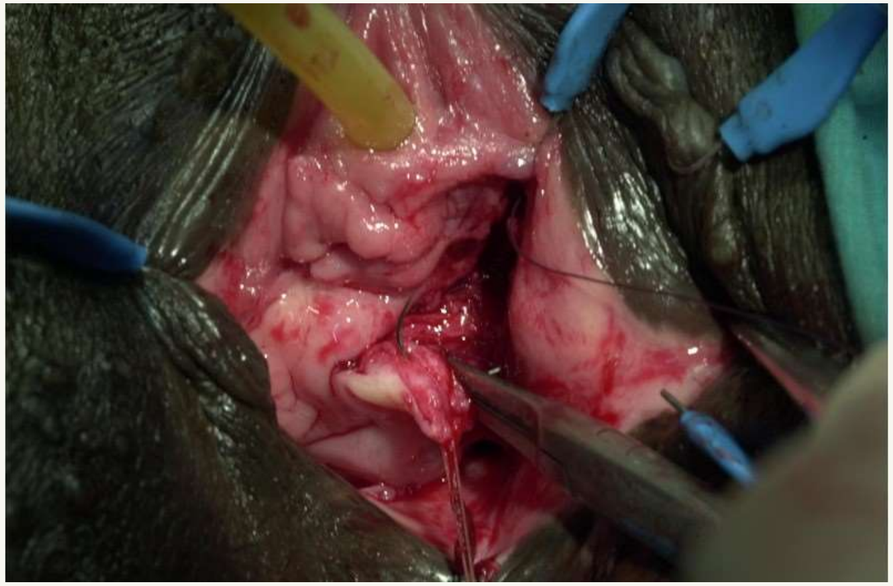


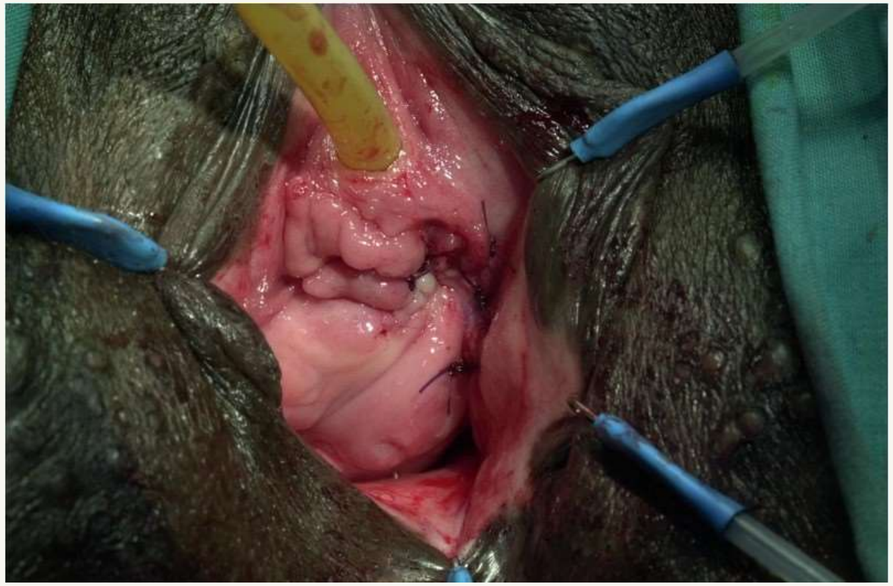
# Surgical Tips

- Extended Trendelenburg position
- Scott retractor
- Headlight
- Sharp scissors
- Suture material

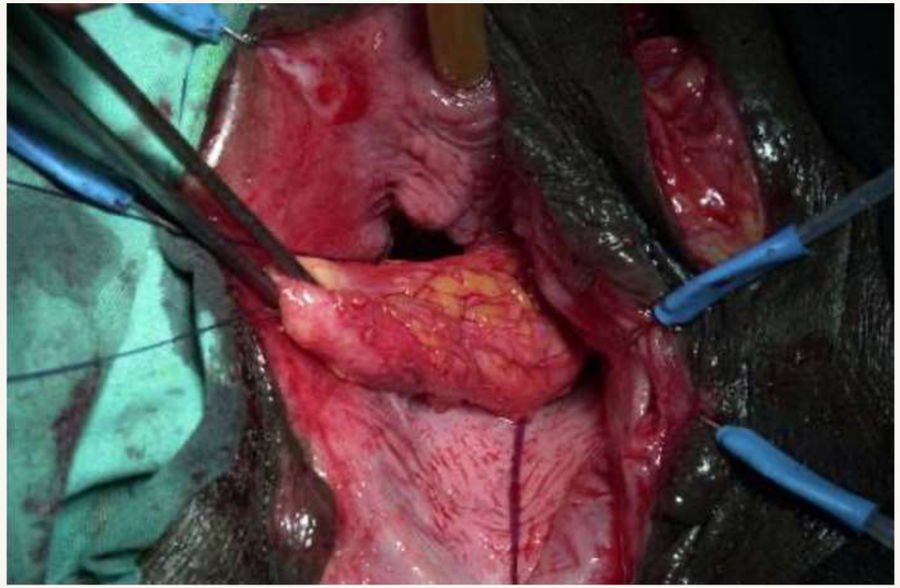
  - Post op follow-up
  - *cave* : obstructed catheter !

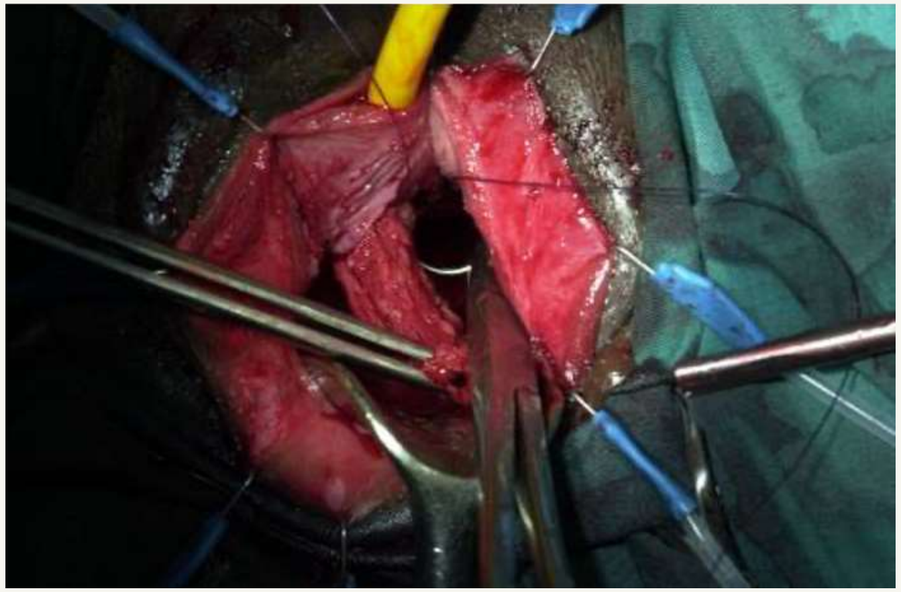


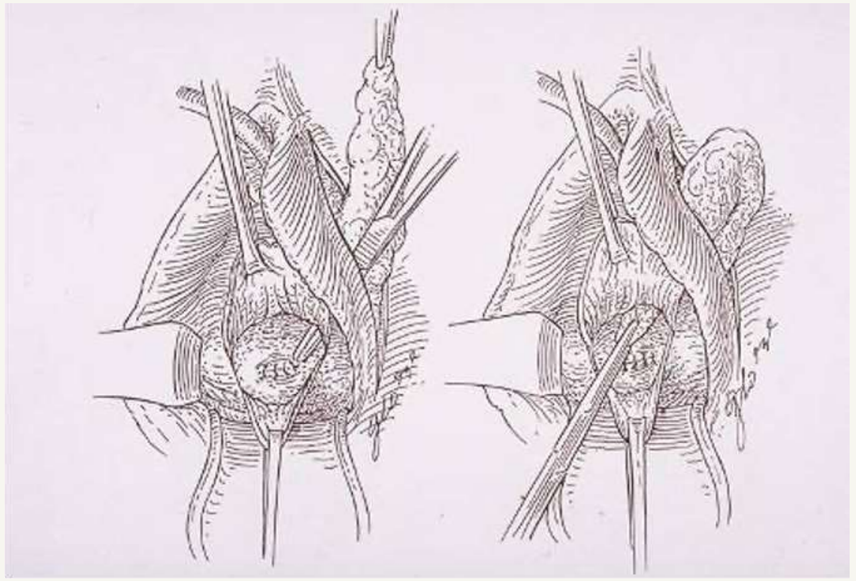




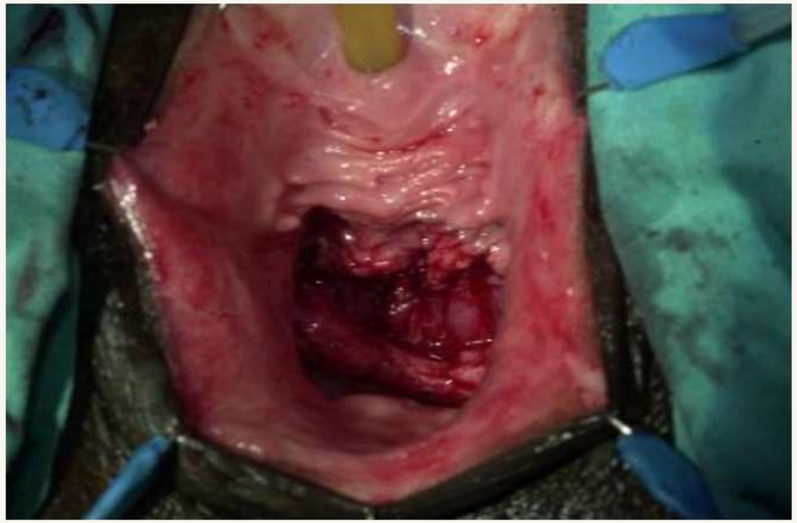
Vaginal Flap

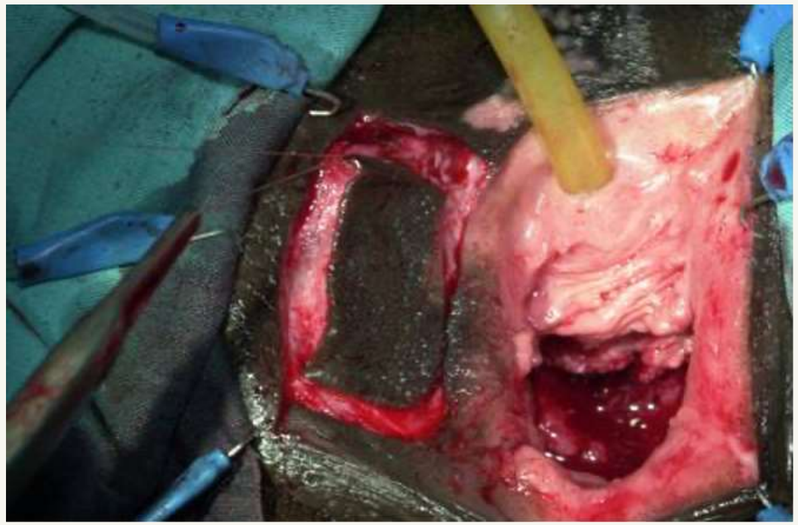




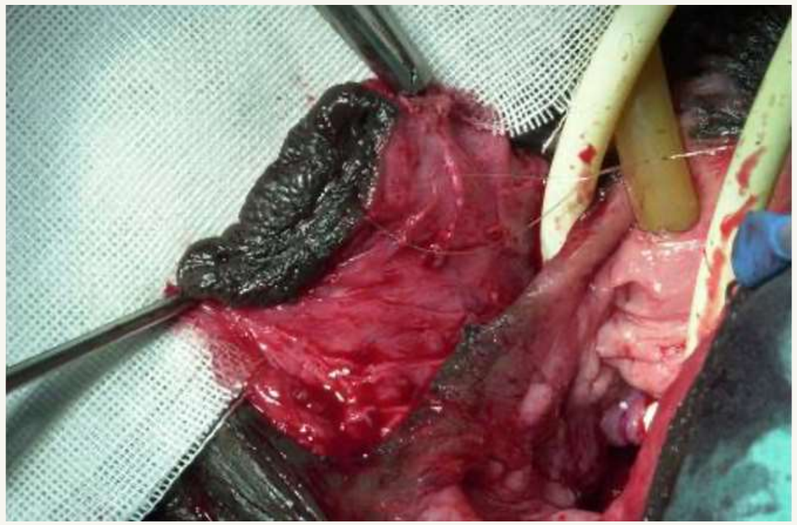


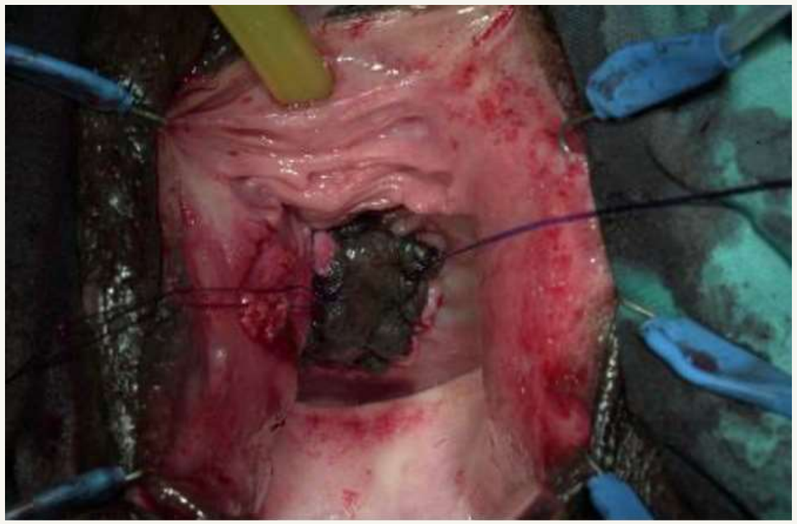
Martius Flap





## Cutaneous Flap





# Development in Treatment :  flaps

| | 1996-2001 | > 2002 |
|---|---|---|
| Martius Flap | 30% | 10% |
| Cutaneous Flap | 12% | 2% |

Progrès en Urologie
Volume 25, Issue 17, December 2015, Pages 1225-1231

# Study of the outcome of surgical management of vesico-vaginal fistulas with and without interposition of the Martius graft: A Cameroonian experience.

P.-M.Tebeu, J.Fokom-Domgue, G.Kengne Fosso, P.Tjek Biyaga, J.Nelson Fomulu, C.-H.Rochat

Introduction
This study aimed to investigate whether Martius' graft has an effect on the outcome of the surgical management of genitourinary fistula.
Patients and methods
This was a retrospective comparative study of all cases of genitourinary fistula that underwent curative surgery in two Cameroonian hospitals. Patients were all operated between January 2005 and July 2011 in the gynecology unit of the Maroua Regional Hospital and the University Hospital Centre of Yaoundé by a well-trained surgeon. The characteristics of women with fistulas operated without graft of Martius were compared with those of women operated with graft of Martius.

Results
Among the 81 genitourinary fistulas operated, 28 (34.6%) had benefited from graft of Martius. Depending on the characteristics of obstetric fistula, the two groups (that of patients who had a cure with, and that of patients who had a cure without interposition of graft of Martius) were similar: there was no difference in the proportion of rigid edges (89.3% vs. 73.6%, P = 0.0989); in the proportion of vaginal flanges (78.6% vs. 60.4%, P = 0.0986), in the proportion of cervical localization (42.9% vs. 28.3%, P = 0.3762), in the proportion of fistulas with a size greater than 2 cm (64.3% vs. 39.6%, P = 0.0702), nor in the proportion of recurrent fistulas (28.6% vs. 41.5%, P = 0.2523) between the two groups. Similarly, both groups were comparable according to the results of surgery: there was no difference in the overall closure rate (85.7% vs. 79.2%, P = 0.347) nor in the closure of fistula with continence (60.7% vs. 67.9%, P = 0.260) between the two groups. The use of graft of Martius had no effect on the overall closure of genitourinary fistula in our series [OR: 1.57; 95% CI: 0.4 to 6.6; P = 0.680].

## Conclusion and interpretation

The Martius graft does not seem to affect the outcome of the surgical management of genitourinary fistula. These results need to be confirmed by studies on a larger population.

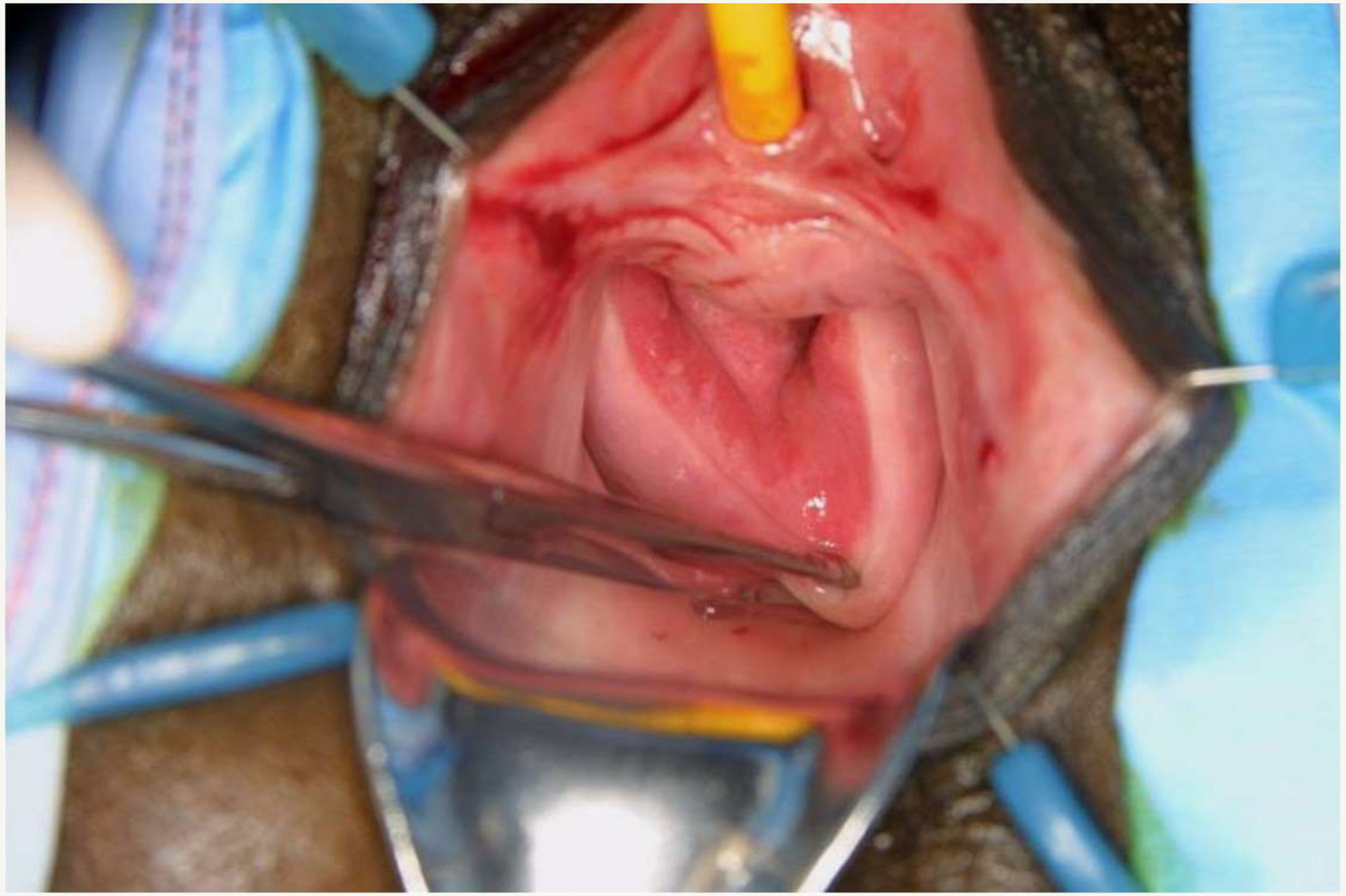
# Development in Treatment : more complicated cases

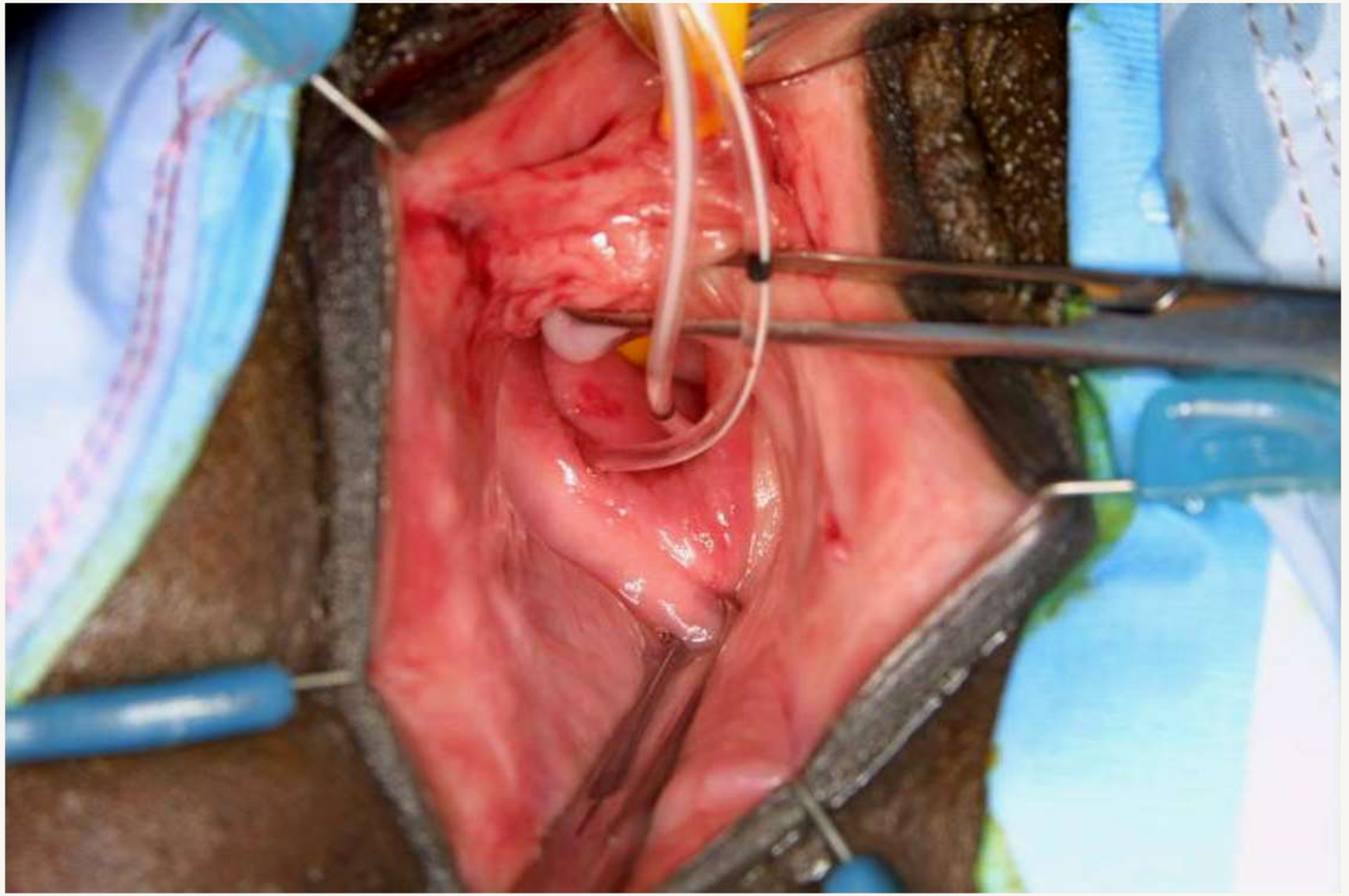
- Circumferential dissection
- Urethral reconstruction
- Diversions

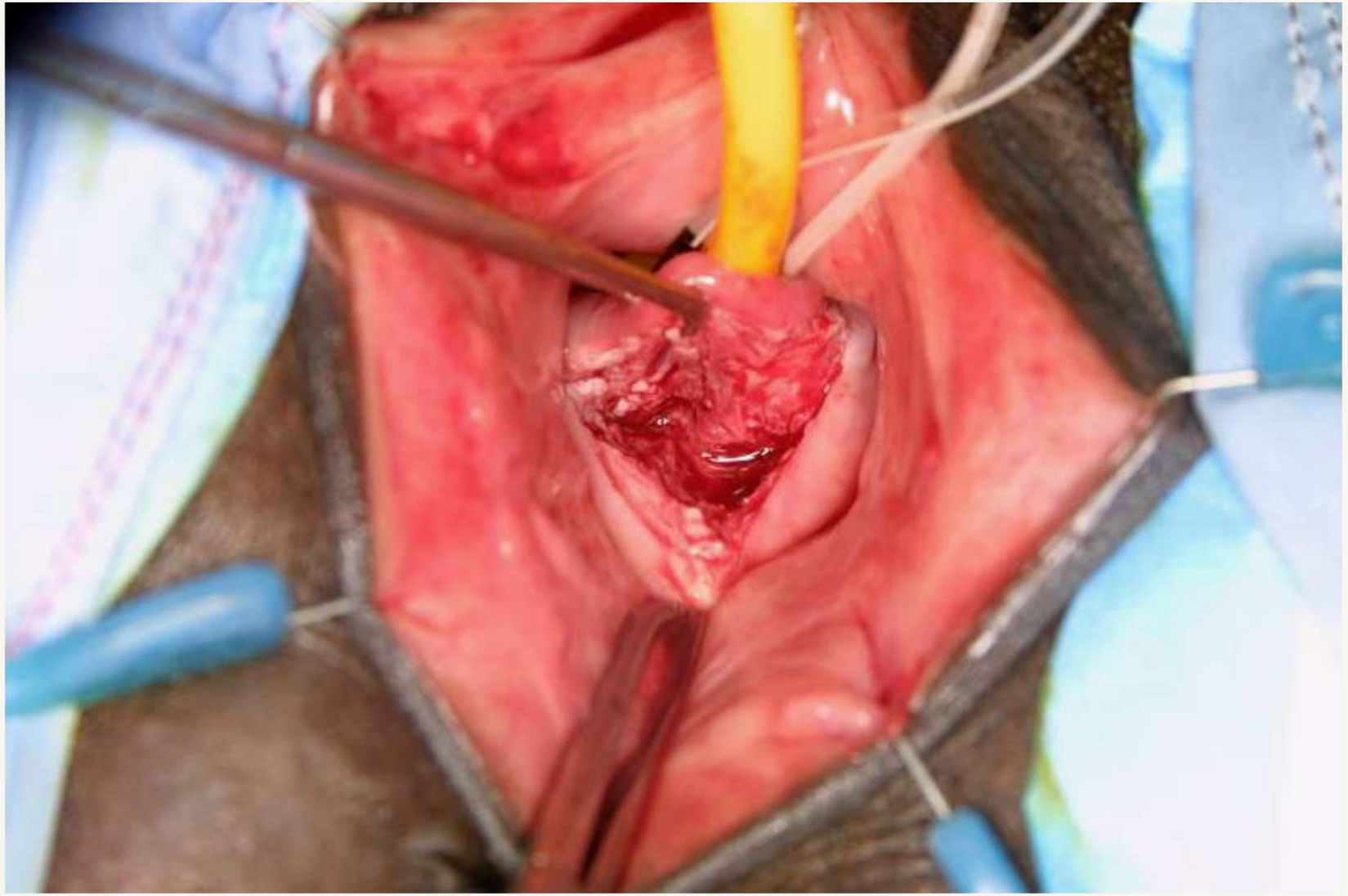
  - Ureterosigmoidostomy

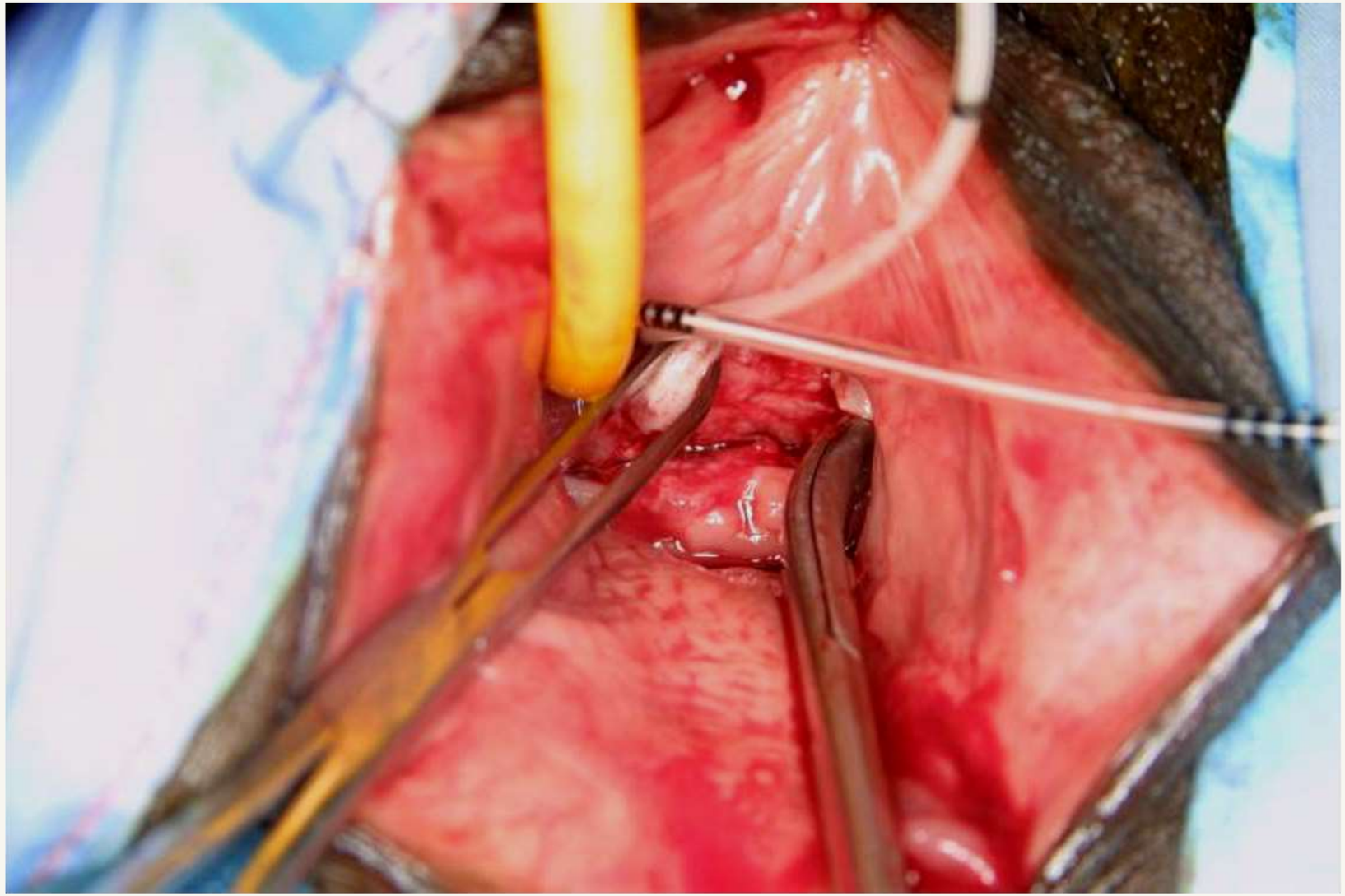
  - Mayence II

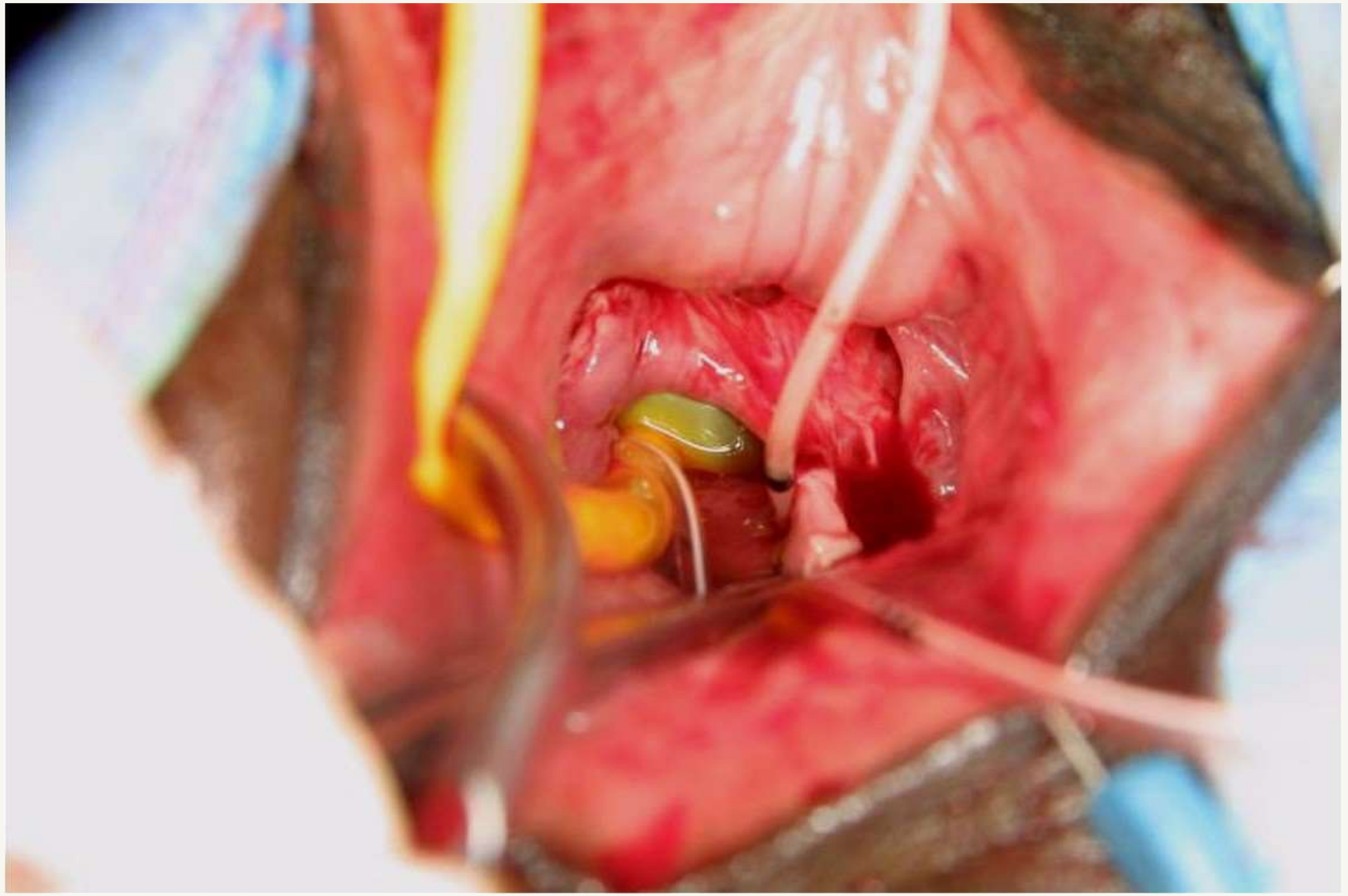
# Circumferential dissection

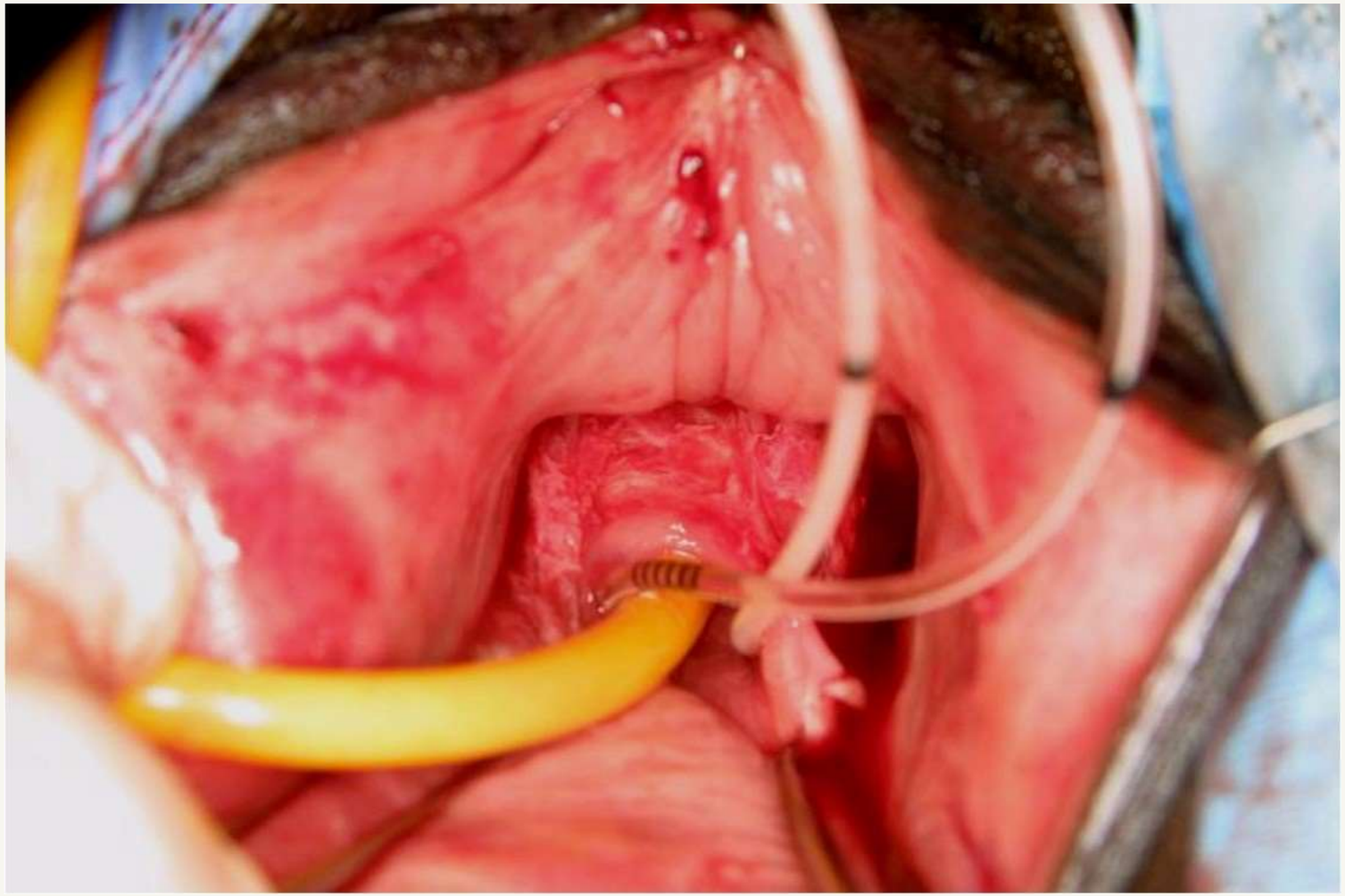


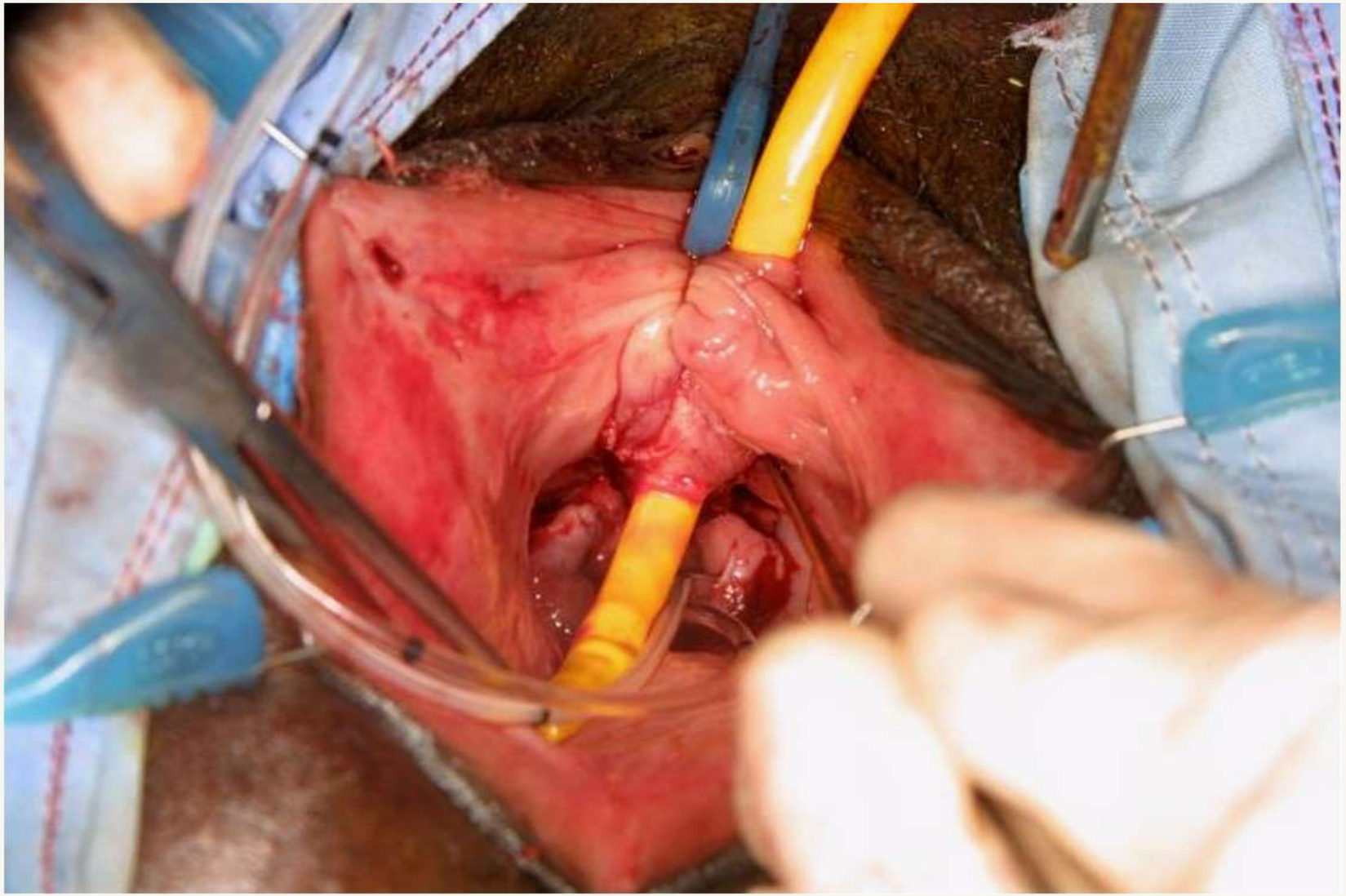


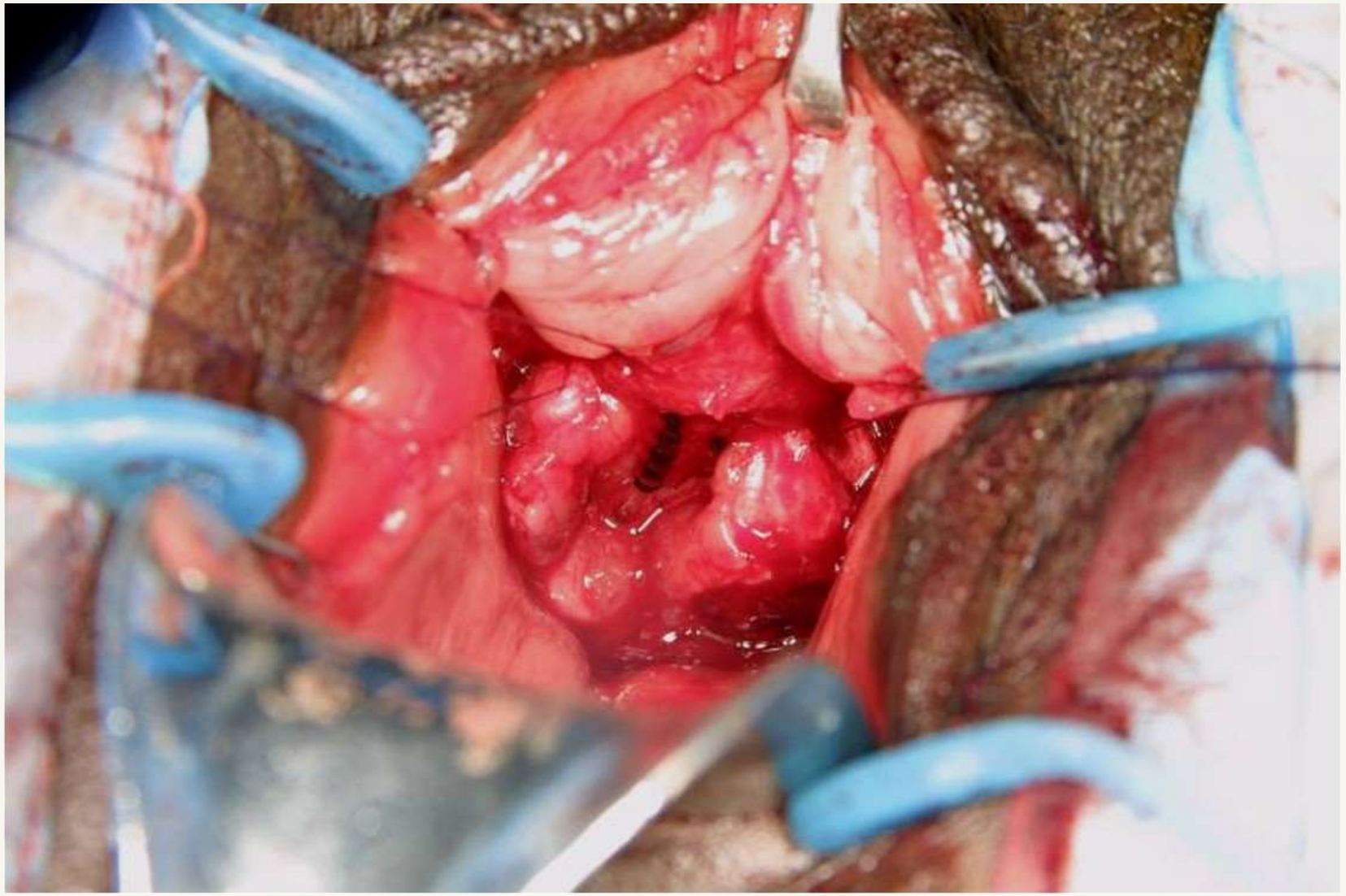


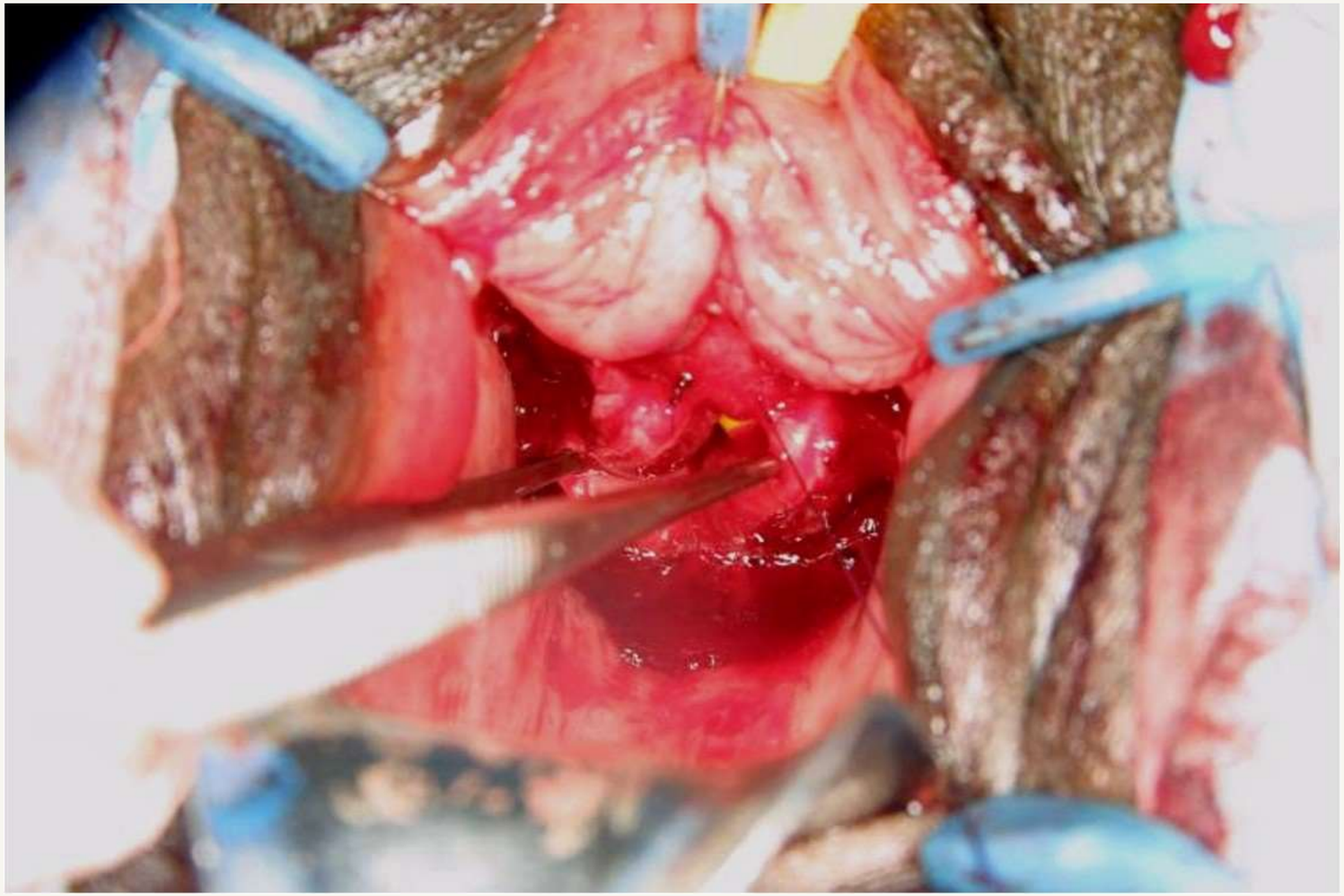


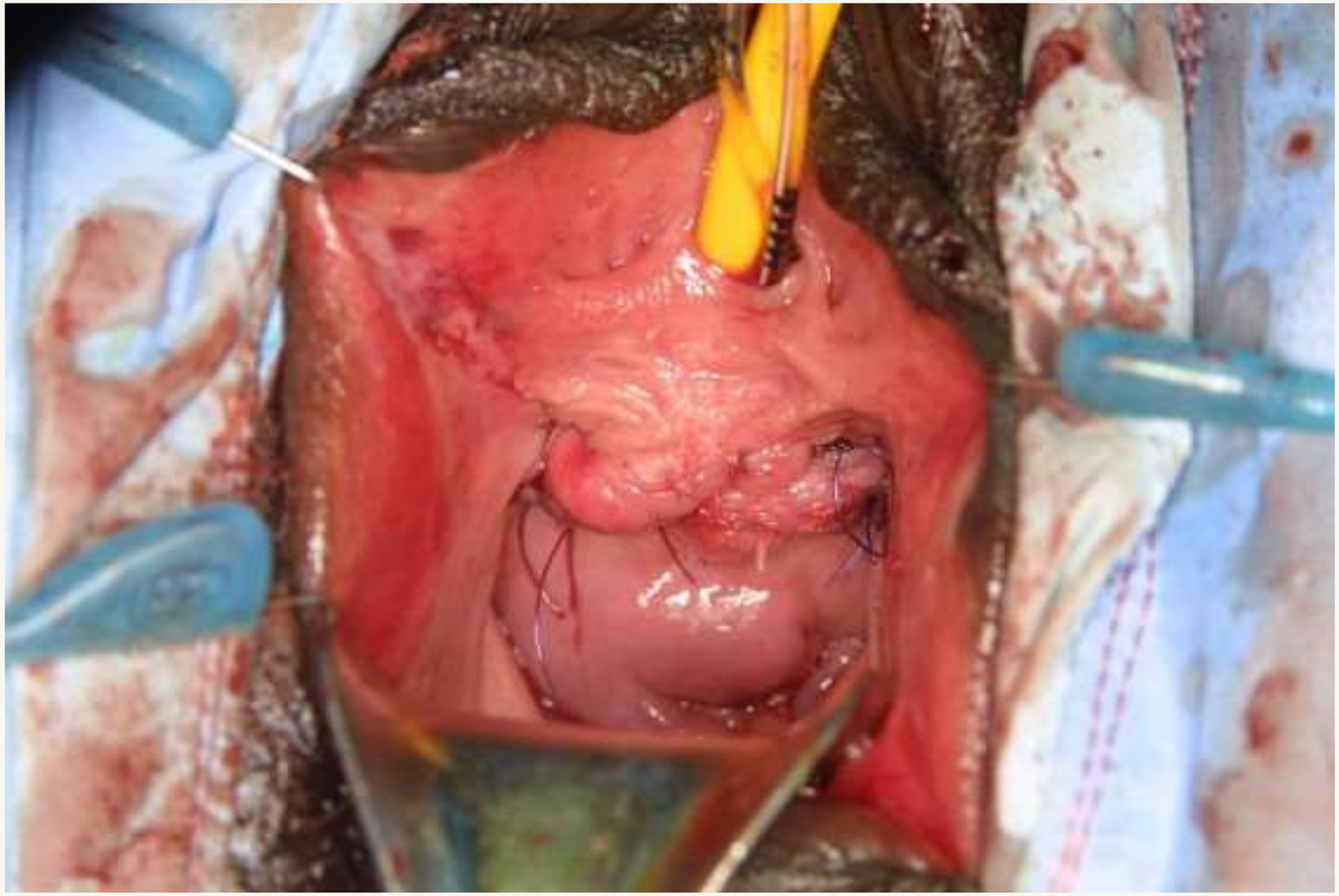


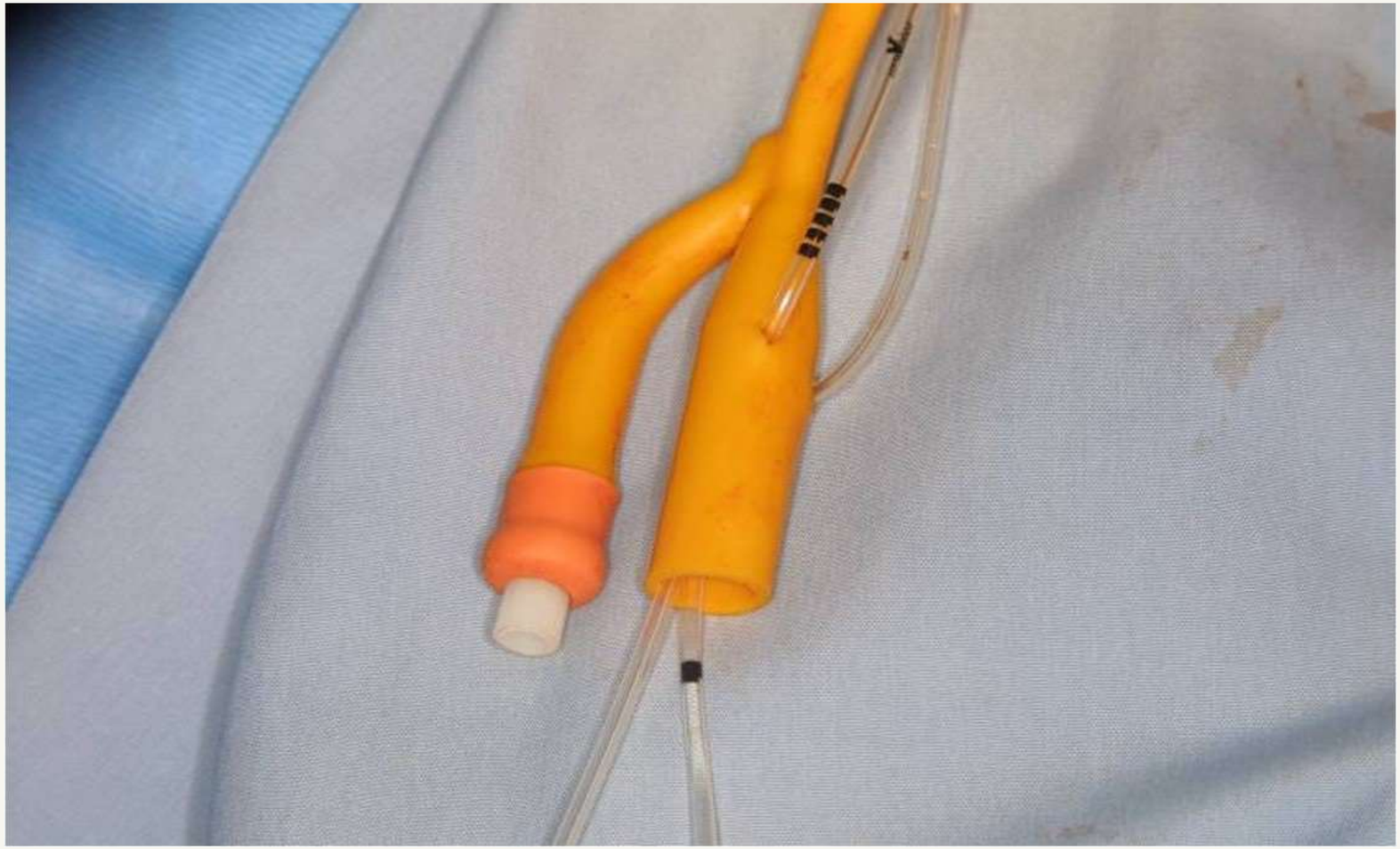




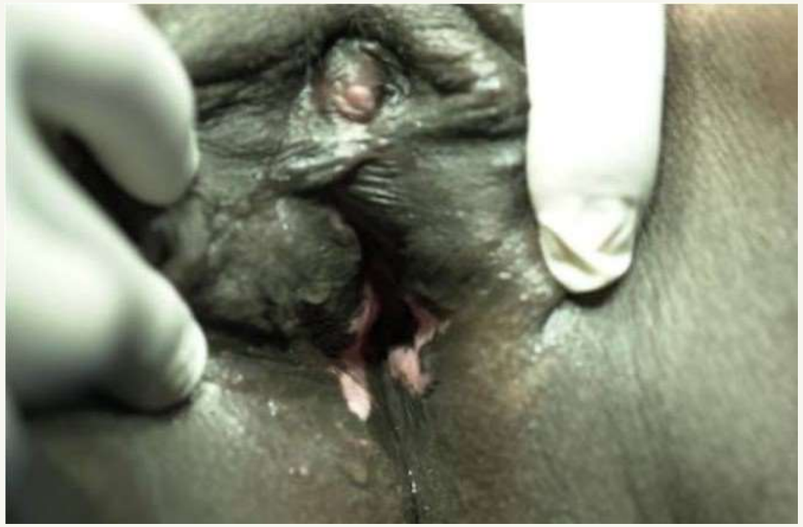


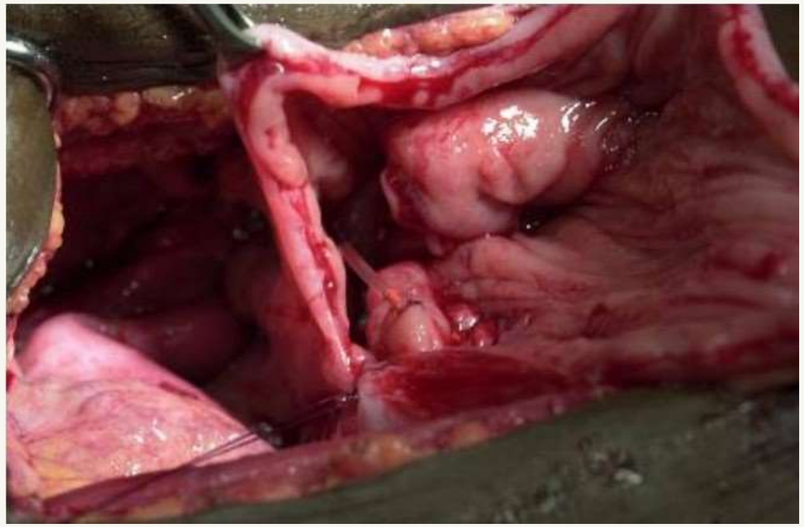


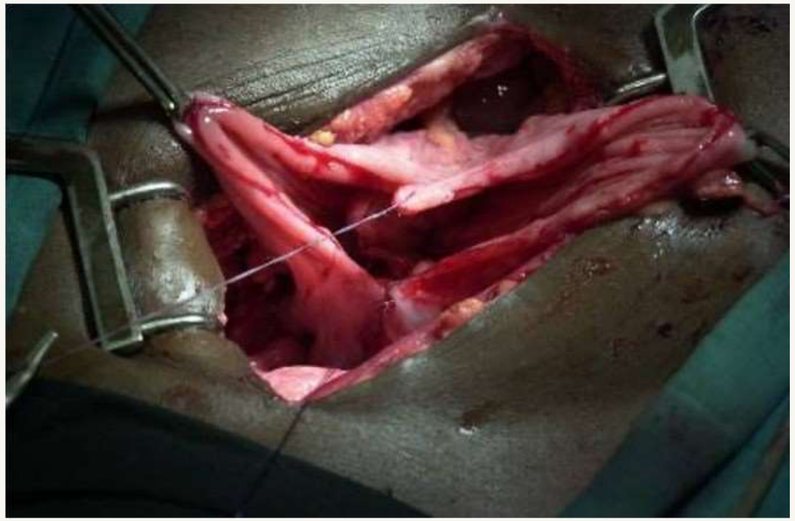


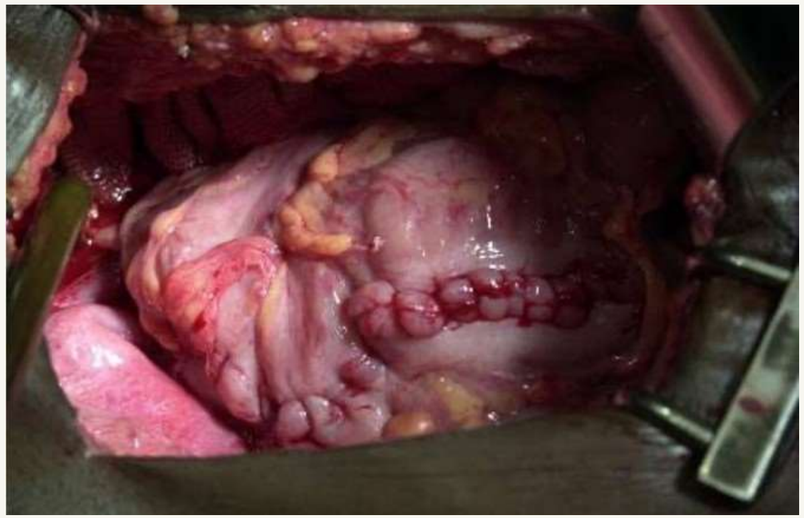



Reconctruction
cervico-urétrale complexe









## Mainz II Diversion

# Retrospective survey 2005-2011
# 21patients with urinary diversion Tanguiéta

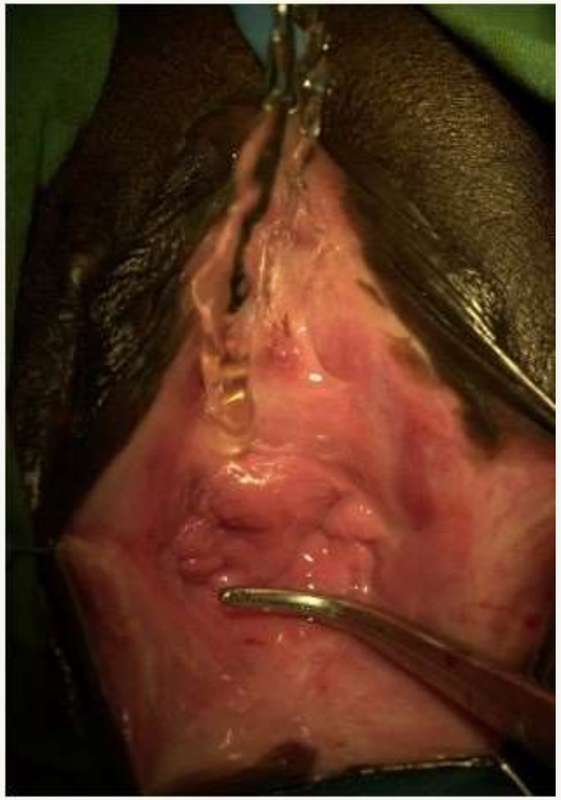
| | Uretero sigmoïdostomy | Mainz Pouch II |
|---|---|---|
| Post operative morbidity | 0 | 4/10 |
| Long term mortality | 5/11 | 4/10 |
| Stools frequency | 1 to 4 | 1 to 2 |
| Sexual activity | 5/6 | 3/7 |

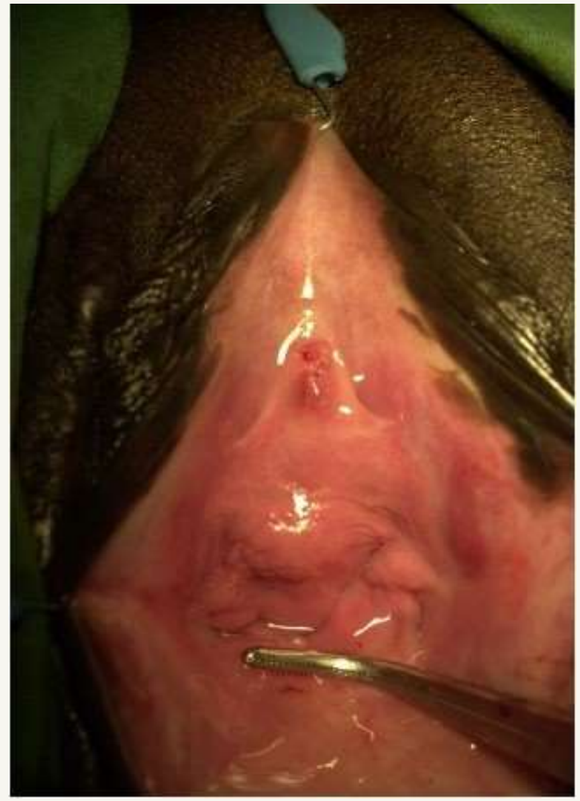
Morbidity and mortality acceptable?

# Stress Incontinence after Fistula Repair

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

For experts and motivated surgeons



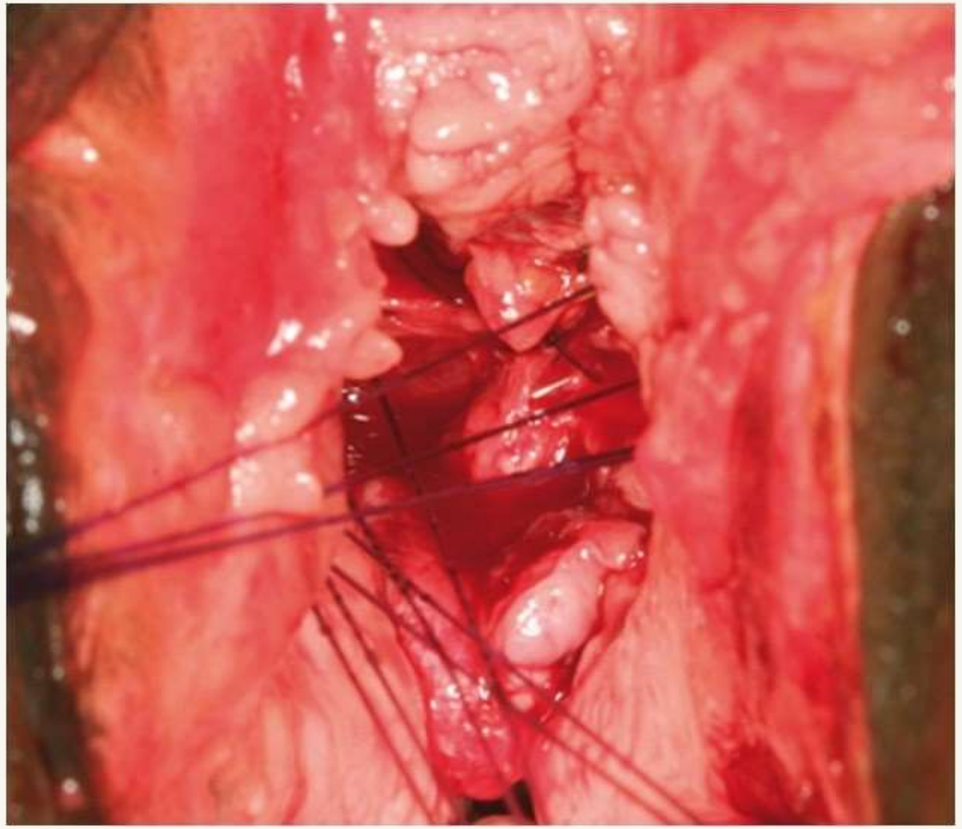


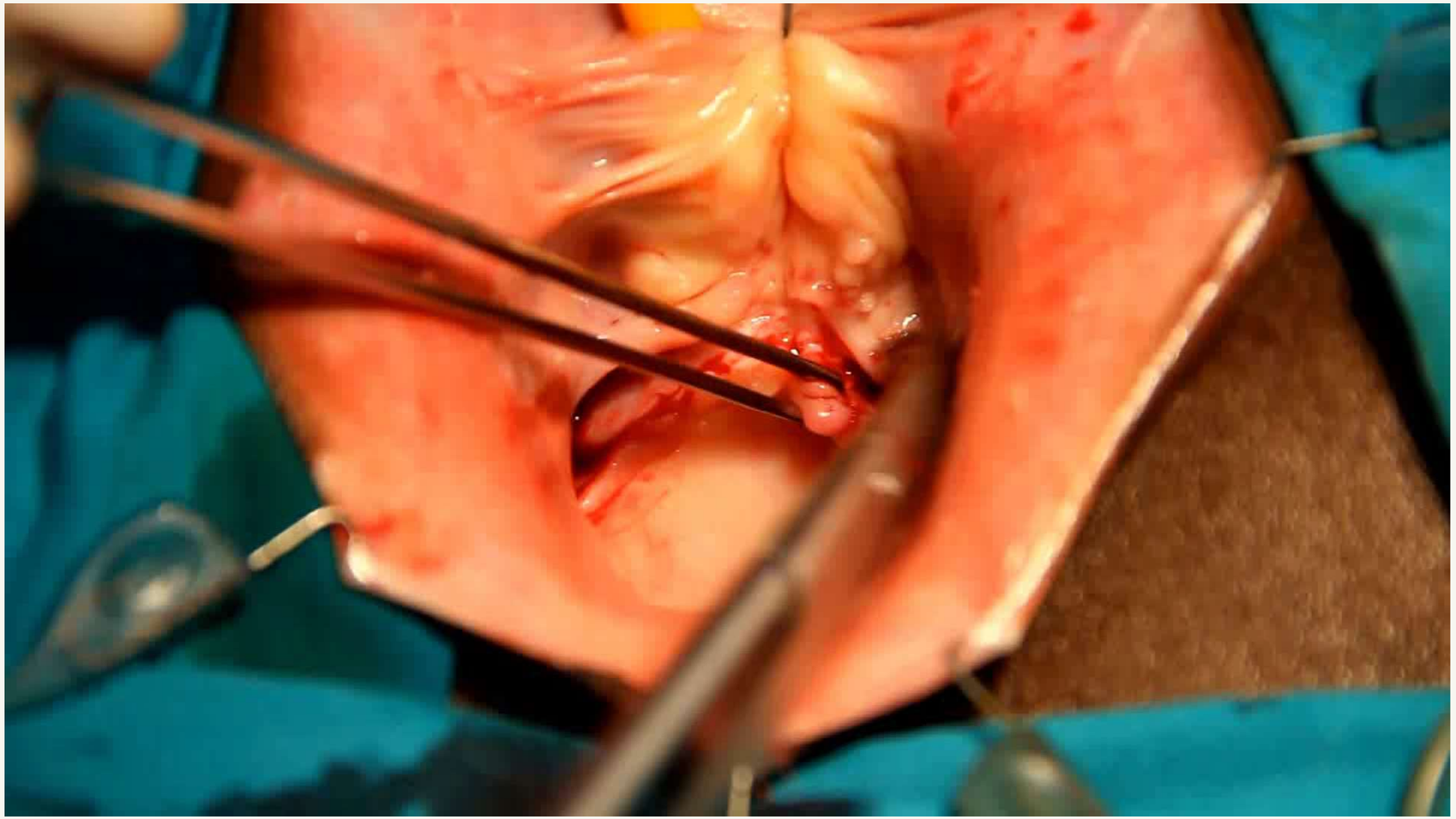
# Development in Treatment : Stress Incontinence

- 2002 colposuspension by vaginal flap
- 2005 TOT (African Tape) abandoned !
- 2010 trigonisation and endopelvic fascia elevation
- 2012 colposuspension with tape of « rectus fascia »

Trigonisation with the plicature of pubocervical fascia.

Elevation of bladder neck to endopelvic fascia after large opening of the periurthral spaces.





« Rectus fascia sling»

# Rectus Fascia Sling After Repair of Obstetrical Fistulas: A Review of 12 Cases of Stress Urinary Incontinence in Tanguieta, Benin

Jessica Harroche, MD
Department of Obstetrics & Gynecology and Women's Health

Montefiore
THE UNIVERSITY HOSPITAL

EINSTEIN
Albert Einstein College of Medicine
OF YESHIVA UNIVERSITY

## Conclusion

Rectus Fascial Slings :

- Viable and sustainable long term solution to post op SUI
- Next Step: Identifying surgical patients for prophylactic procedure

# Premise of a Model to Fight a Poorly Understood Disease

## 1996

FIRST CAMPAIGN

## 2001

FIRST DONATION

PRODUCTION OF THE FILM:

NOÉLIE OR THE FORGOTTEN REALITY

# Creation of the GFMER Foundation, an International Network

2002

FOUNDATION BOARD GFMER

Network,
Visibility
New partners

2003

CAMPAIGN TO END OBSTETRIC FISTULA

UNFPA
WHO

2004

SUPPORT FROM THE CITY OF GENEVA

15 years of collaboration

# The Keystone of the Model : Training, Recruitment, Monitoring and Networking

## SURGICAL CAMPAIGNS

Getting to grips with this demanding surgery

## DATA BASE

Sharing information with other NGOs

## RECRUITMENT AND FOLLOW-UP

NGO: ESSOR
Sentinelles

## UNIVERSITY PARTNERSHIPS

- Faculté des sciences de Cotonou (2006)
- Albert Einstein College of Medicine New York (2008)

## WORKING GROUPS

FIGO
IOFWG
AFOA

## Worldwilde


**A Switzerland**

Headquarters of Fistula Group (Geneva) and of Sentinelles in Lausanne.

**B Benin**

Focal point of the Fistula Group programme.

**C New York (USA)**

Albert Einstein College of Medicine, a collaboration of over 10 years.

**D Detroit (USA)**

Collaboration with Henry Ford Hospital, Detroit, in particular Dr James Peabody, urologist and Department vice chairman.

**E Guinea Conakry**

Cooperation via the AFOA (Association of Obstetric Fistula in Africa) and Engender Health led by Dr Jerôme Blanchot and Dr Jean-Marie Colas.

**F Burkina Faso**

Collaboration with Dr. Moussa Guiro for operations in both Burkina Faso and Benin.

**G Cameroon**

Collaboration with Prof. Pierre-Marie Tébeu for operating missions in Yaoundé and Central Africa.

**H Congo Brazzaville**

Headquarters of CIESPAC, a partner of Fistula Group.

**I Madagascar**

Collaboration with SALFA.

# An Inspiring Model

- Treatment
- Training
- Research
- Prevention
- Rehabilitation of patients
- Awareness of populations

International Journal of GYNECOLOGY & OBSTETRICS

First published: 28 November 2019

# Prognostic factors and long-term outcomes of obstetric fistula care using the Tanguiéta model

Anne-Caroline Benski, Martine Delavy, Charles-Henry Rochat, Manuela Viviano, Rosa Catarino, Valérie Elsig, Abdoulaye Doulougou, Patrick Petignat, Pierre Vassilakos

Abstract

Objectives

To identify factors influencing the long-term prognosis after surgical repair of obstetric fistula, establish a prognosis-based classification system, and examine changes in quality of life after surgery.

Methods

A retrospective study of 308 women who underwent obstetric fistula repair at Saint Jean de Dieu Hospital, Tanguiéta, Benin, between 2008 and 2016, and were supported by a multidisciplinary management model. All participants were from rural areas of Burkina Faso. The women completed interviews before, immediately after, and 2, 4–6, and 12 months after surgery to assess their clinical state and socioeconomic and psychologic status.

Results

Overall, the fistulae of 230/274 (83.9%) women were considered to be repaired after 12 months. Factors associated with poor repair outcome included the presence of sclerotic tissue (odds ratio [OR], 0.25; 95% confidence interval [CI], 0.11–0.53) and intraoperative complications (OR, 0.16; 95% CI, 0.07–0.39). Women with successful surgery had a better quality of life as compared with women with an unrepaired fistula (Ditrovie score, 1.1 vs 3.9; P<0.001).

## Conclusion

The multidisciplinary Tanguiéta model for management of obstetric fistula allowed successful fistula closure, thereby facilitating the women's long-term social reintegration, and improved quality of life.

Int J Gynaecol Obstet. 2015 Mar;128(3):264-6.
doi: 10.1016/j.ijgo.2014.09.028. Epub 2014 Dec 3.

# One-year follow-up of women who participated in a physiotherapy and health education program before and after obstetric fistula surgery

Yves-Jacques Castille, Chiara Avocetien, Dieudonné Zaongo, Jean-Marie Colas, James O Peabody, Charles-Henry Rochat

Abstract

Objective

To investigate whether the positive impact of a program of physiotherapy and health education on the outcome of obstetric fistula surgery was maintained after 1 year.

Methods: The present follow-up analysis included 108 women who underwent obstetric fistula surgery at a center in Tanguiéta, Benin, between March 2011 and March 2012, and who had received a structured program of physiotherapy and health education before and after surgery. After discharge, follow-up visits were made 3, 6, and 12 months after surgery. The Ditrovie scale was used to measure quality of life (QoL), and continence and performance of the physiotherapy exercises were assessed.

Results: Mean QoL score was 36.9 (range 16.0-49.0) before surgery. Overall, 84 women were followed up for 1 year. Their mean QoL score had improved significantly to 18.5 (range 10.0-47.0; P<0.001). Between hospital discharge and 1 year, the number of women with a closed fistula increased from 48 (57.1%) to 53 (63.1%) and the number with urinary stress incontinence reduced from 11 (13.1%) to 9 (10.7%).

## Conclusion

Results obtained after surgery and physiotherapy were maintained at 1 year, and QoL had improved significantly. When women are encouraged to continue exercises, improvements are also seen in residual stress incontinence.


NYONU GBETA TONAYI NUKUN

# Challenges

- Intensify recruitment
- Provide free fistula surgery
- Improve the training of obstetric gynecologists (*cave*: iatrogenic fistula)
- Improve the quality of technical equipment
- Integration of prolapse surgery in the model
- Diversify support for social reintegration

# Other Challenges: Fistula GFMER Internet Data Base


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

# On-line Training Course

Version française

OXFORD MATERNAL AND PERINATAL HEALTH INSTITUTE


Maternal Health Task Force

THE GLOBAL HEALTH NETWORK
Enabling research by sharing knowledge

## Obstetric Fistula

**The fourth online training course in the field of maternal and perinatal health by GFMER/MHTF/OMPHI/TGHN**

**An interactive course for health professionals**

**Access the Course**

# May 2022
# A première: Live Surgery in Tanguiéta

A live video-transmitted fistula operation followed by an interactive debate took place on Monday 2 May 2022 from the Saint Jean de Dieu Hospital in Tangiuiéta. The surgery was performed by Dr Renaud Aholou with the team from the Saint Jean de Dieu Hospital in Tangiuiéta and commented on by Dr Charles-Henry Rochat and Dr Gilbert Fassinou.

# May 2022
# Special Mission for Complex Cases

A special mission to Cotonou dedicated to persistent incontinence and extreme obstetric fistula cases, with experts from Benin.

# April-May 2022 Synergies with the Training Scholarship Program.

# April-May 2022 Training of 9 Doctors from Cotonou (gynecologists and urologists)

# A Humanitarian Field Project

# Success Story?

RESIDENTS' PAPERS www.AJOG.org

## Obstetric fistulae in West Africa: patient perspectives

Lisa M. Nathan, MD, MPH; Charles H. Rochat, MD; Bogdan Grigorescu, MD; Erika Banks, MD

**OBJECTIVE:** The objective of this study is to gain insight into the nature of obstetric fistulae in Africa through patient perspectives.

**STUDY DESIGN:** At l'Hôpital Saint Jean de Dieu in Tanguieta, Benin, 37 fistula patients underwent structured interviews about fistula cause, obstacles to medical care, prevention, and reintegration by 2 physicians via interpreters.

**RESULTS:** The majority of participants (43%) thought their fistulae were a result of trauma from the operative delivery. Lack of financial resources (49%) was the most commonly reported obstacle to care, and prenatal care (38%) was most frequently reported as an intervention that may prevent obstetric fistulae. The majority (49%) of the participants requested no further reintegration assistance aside from surgery.

**CONCLUSION:** Accessible emergency obstetric care is necessary to decrease the burden of obstetric fistulae in Africa. This may be accomplished through increased and improved health care facilities and education of providers and patients.

# New Research Area: Sexuality and Obstetric Fistula

Hôpitaux Universitaires Genève

In 2020, Fistula Group planned to develop a qualitative study on the socio-psychological and sexual accompaniment of patients from the rural region of North Benin and the urban region of Yaoundé. Today, Fistula Group would like to continue the project with Dr Anne-Caroline Benski, the University of Geneva and the University Hospitals of Geneva in parallel with research projects and the development of telemedicine.

# The Next Generation

PIERRE-MARIE TEBEU MD
CAMEROON / CENTRALE AFRICA

JEAN DE DIEU YUNGA FOMA MD
BENIN

MOUSSA GUIRO MD
BURKINA FASO

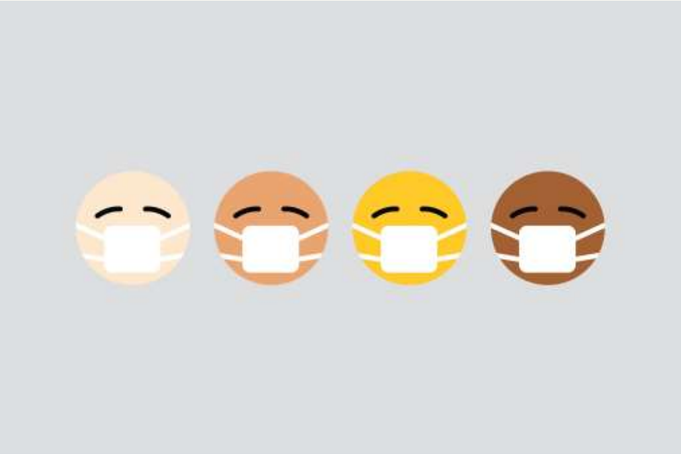
RENAUD AHOLOU MD
BENIN

JEAN- CLAUDE OTSHUDI DIUMI MD
RDC

JACQUES MARTIN RANDRIANTSALAMA MD
MADAGASCAR / SENEGAL

More than 150 doctors and surgeons were trained in the course of the surgical workshops, of which about fifteen were able to treat the most difficult cases.

# The Health Crisis and Terrorist Risks



## CLOSINGS

Airports

Bush taxis

## FEARS

Patients' fears of
going to consultations

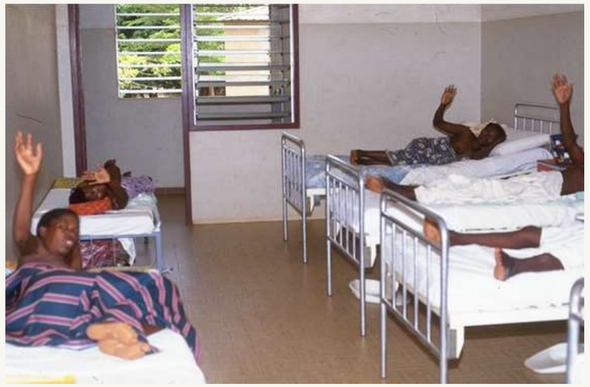
## TERRORIST ACTIVITIES

Border with Burkina Faso

# Concluding Remarks

- Fieldwork is an ongoing process and requires adaptation to local pathologies and existing resources
- It is a priviliege to be able to care for and  learn from our patients
- The care of women with obstetric fistula must be comprehensive and holistic
- The eradication of obstetric fistula remains a major socio-economic issue

… but today, more than before, we have to deal with an uncertain world.



TO GIVE ALL WOMEN THEIR DIGNITY: www.fistulagroup.org