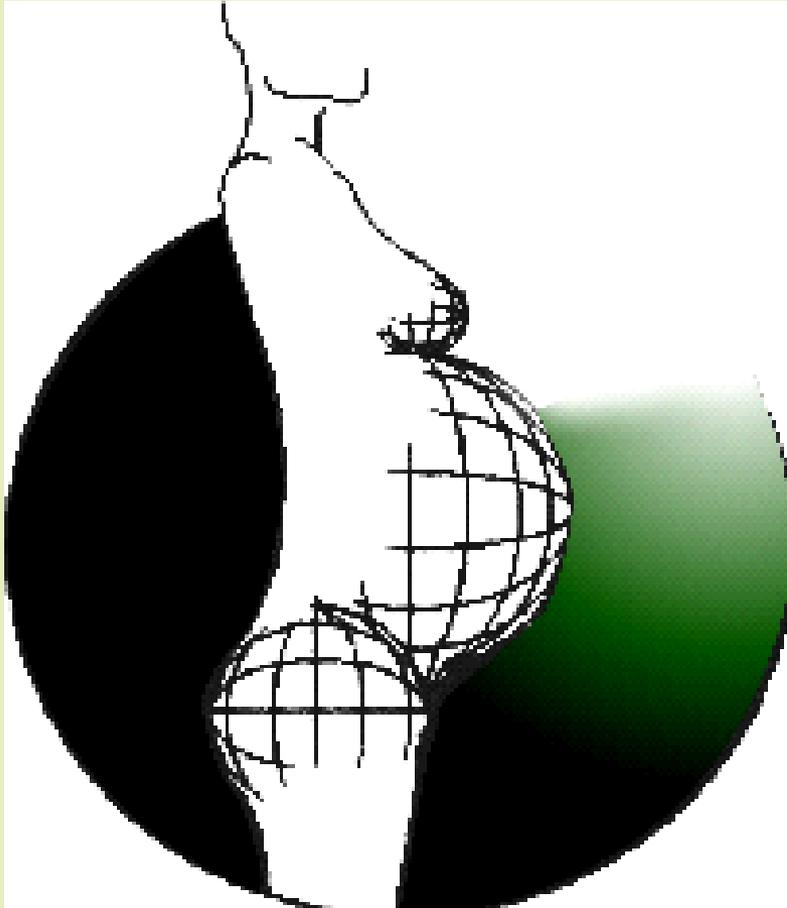


# From Vesico-Vaginal Fistulae to Preventing Maternal Morbidity & Mortality



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**“Caring for Women Injured in Childbirth”**

# DISCLAIMER

- No commercial interests
- No off-label uses recommended for pharmaceuticals or devices
- Mostly Sub-Saharan Africa perspective

# What is a Vesico-Vaginal fistula?

**VVF**-An abnormal opening between the bladder and the vagina that results in continuous, unremitting urinary incontinence.

**Uro-Genital Fistula** is a more comprehensive term for obstetric fistulae as they can be urethro-vaginal, vesico-uterine, recto-vaginal, etc.



She leaks all of her urine  
all of the time!

# What causes obstetric VVF's?

Prolonged, obstructed labor;  
pressure necrosis between the  
bones of the baby's head and the  
bones of the mother's pelvis.



**Pressure Necrosis**

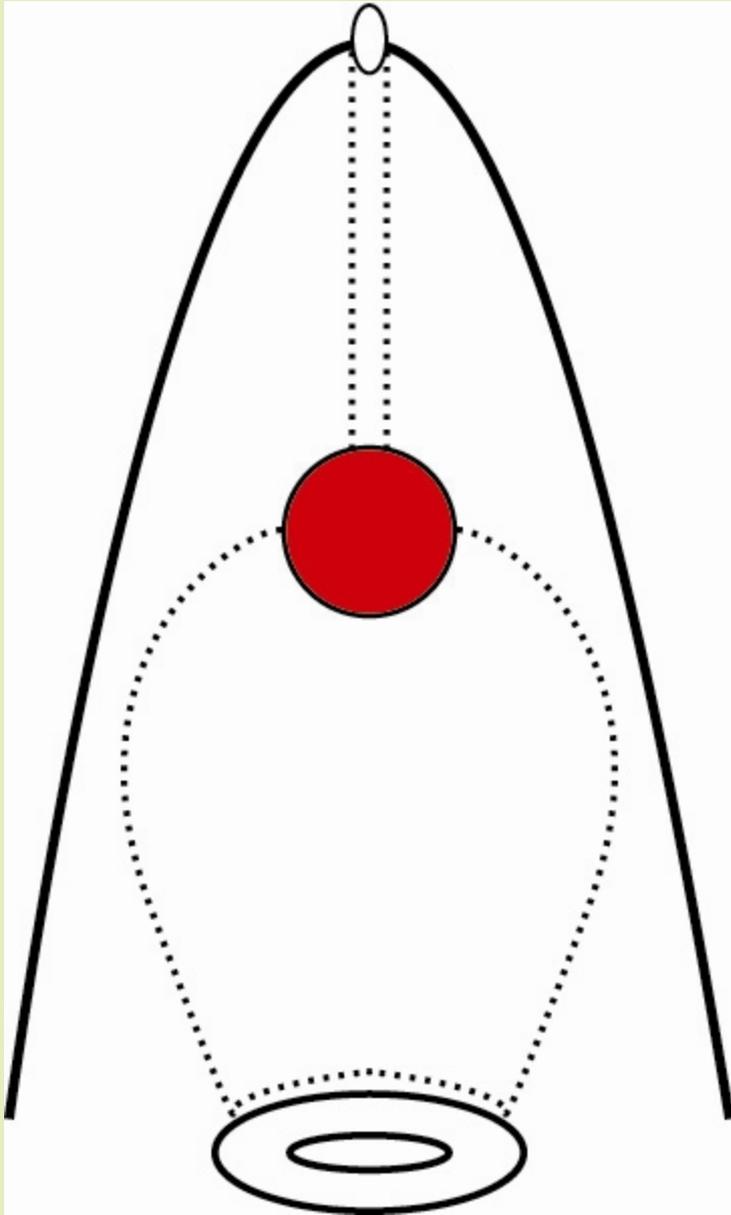
“To meet one of these mothers is to be profoundly moved. Mourning the stillbirth of their only baby, incontinent of urine, ashamed of their offensiveness, often spurned by their husbands, homeless, unemployable except in the fields, they endure, they exist, without friends, without hope. No world charities have ever heard of them. They bear their sorrows in silent shame. Their miseries, untreated, are utter, lonely, and lifelong.”

Reg & Catherine Hamlin, 1974

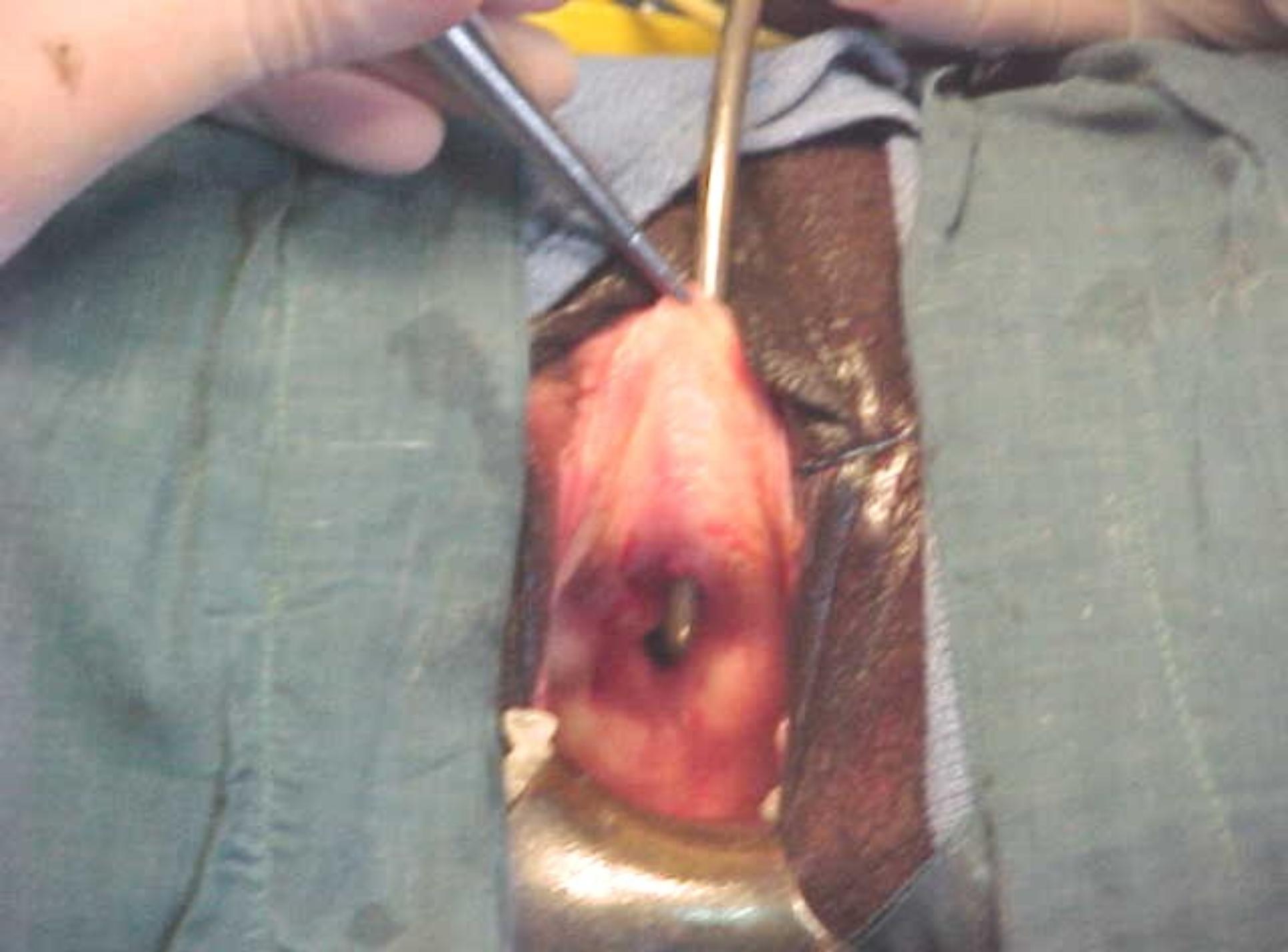


**Vulvar Dermatitis From Urinary Leakage**

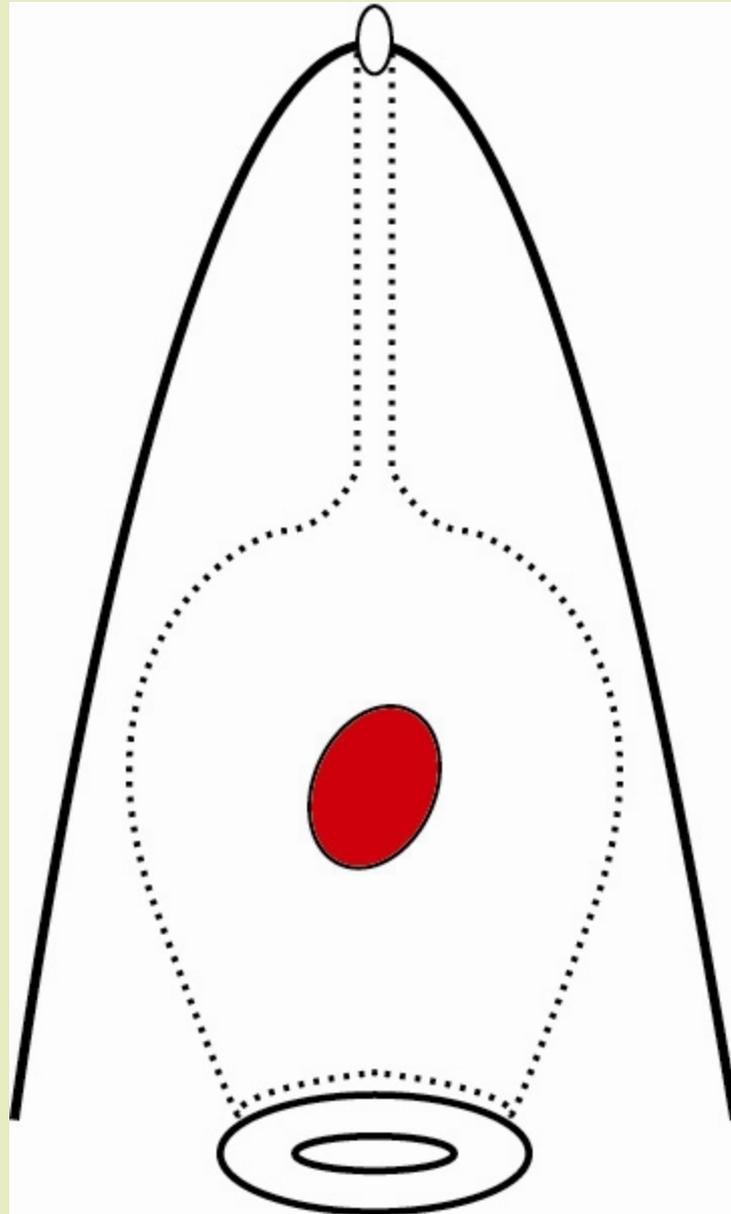




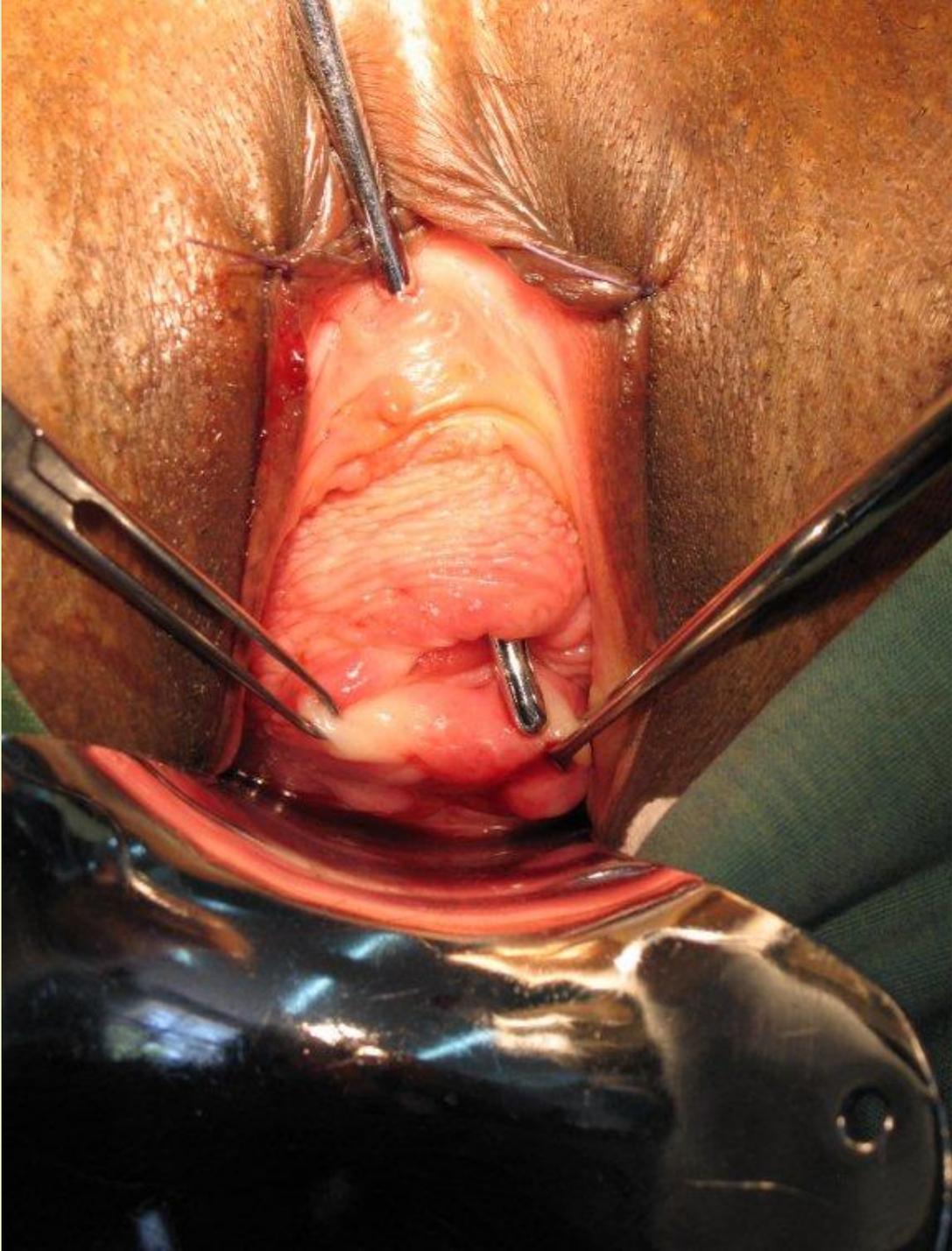
Juxtaurethral  
VVF

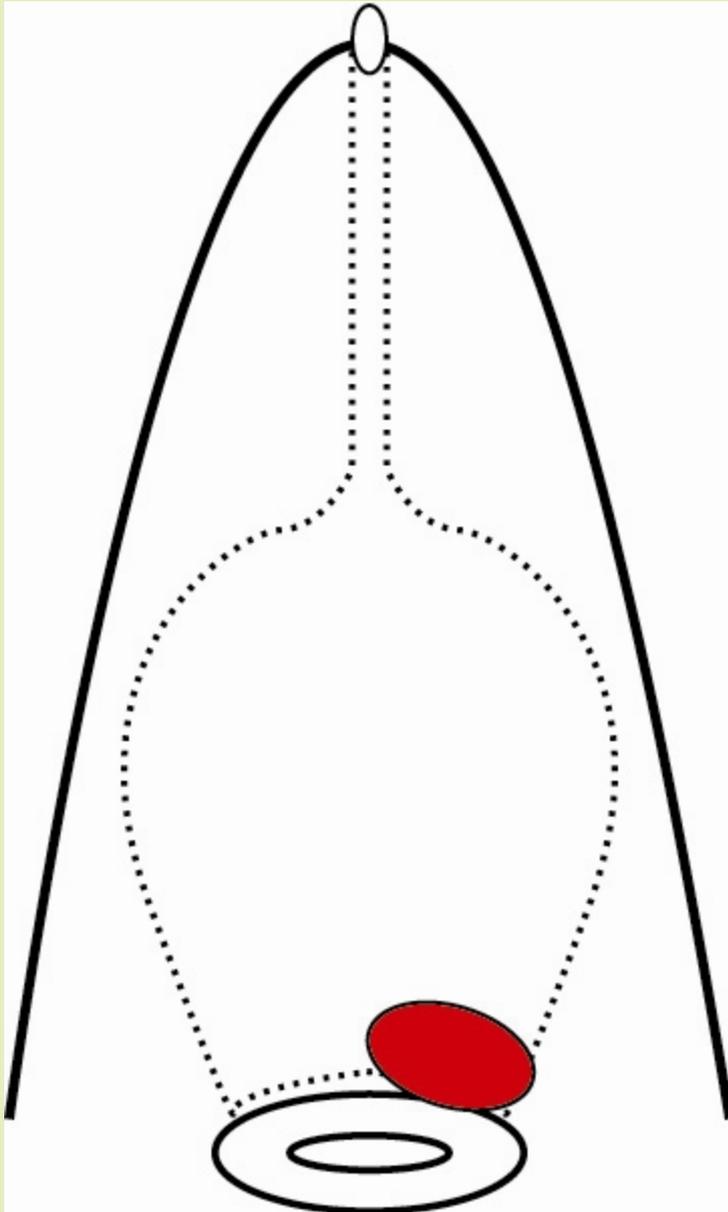




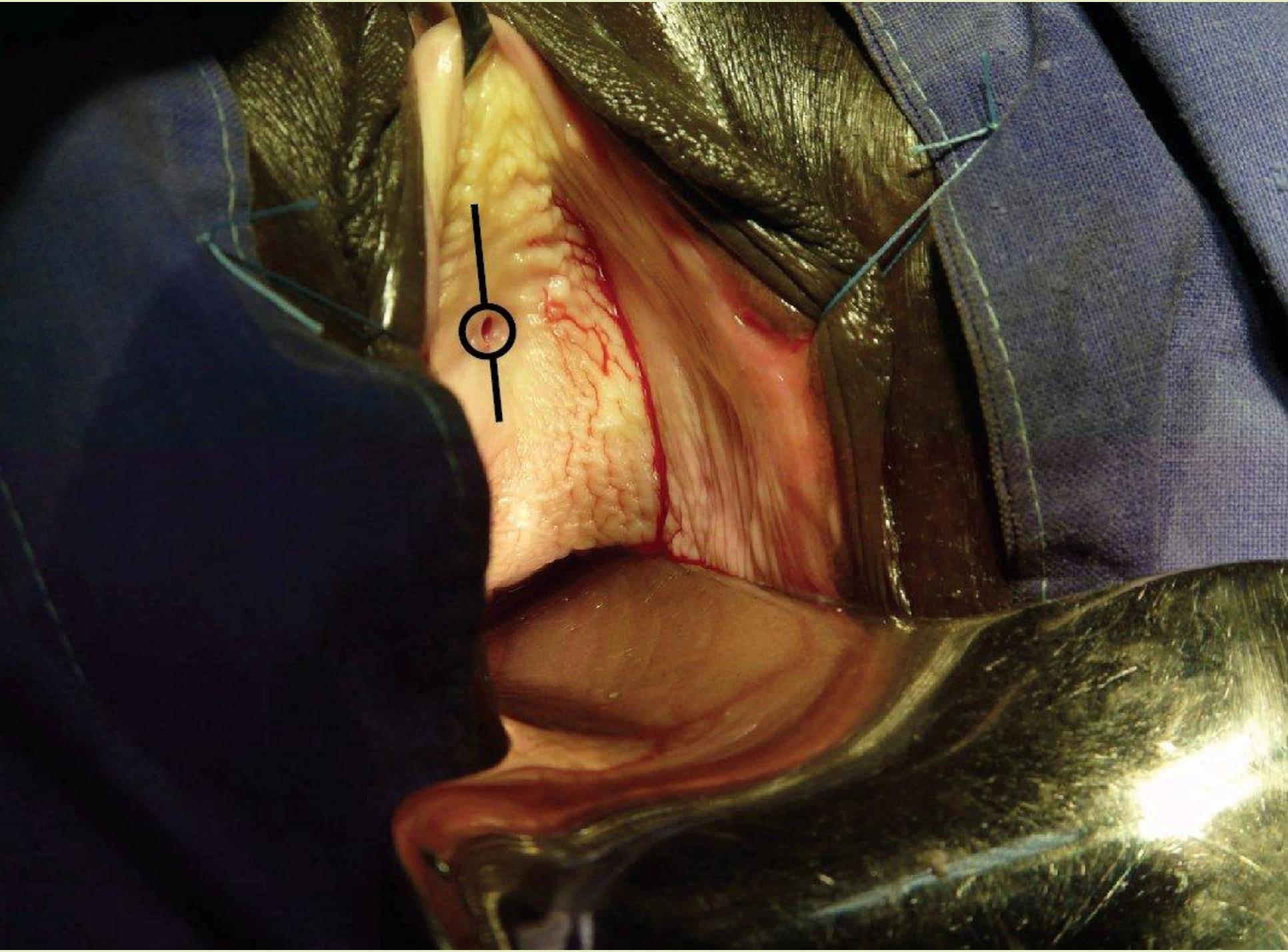


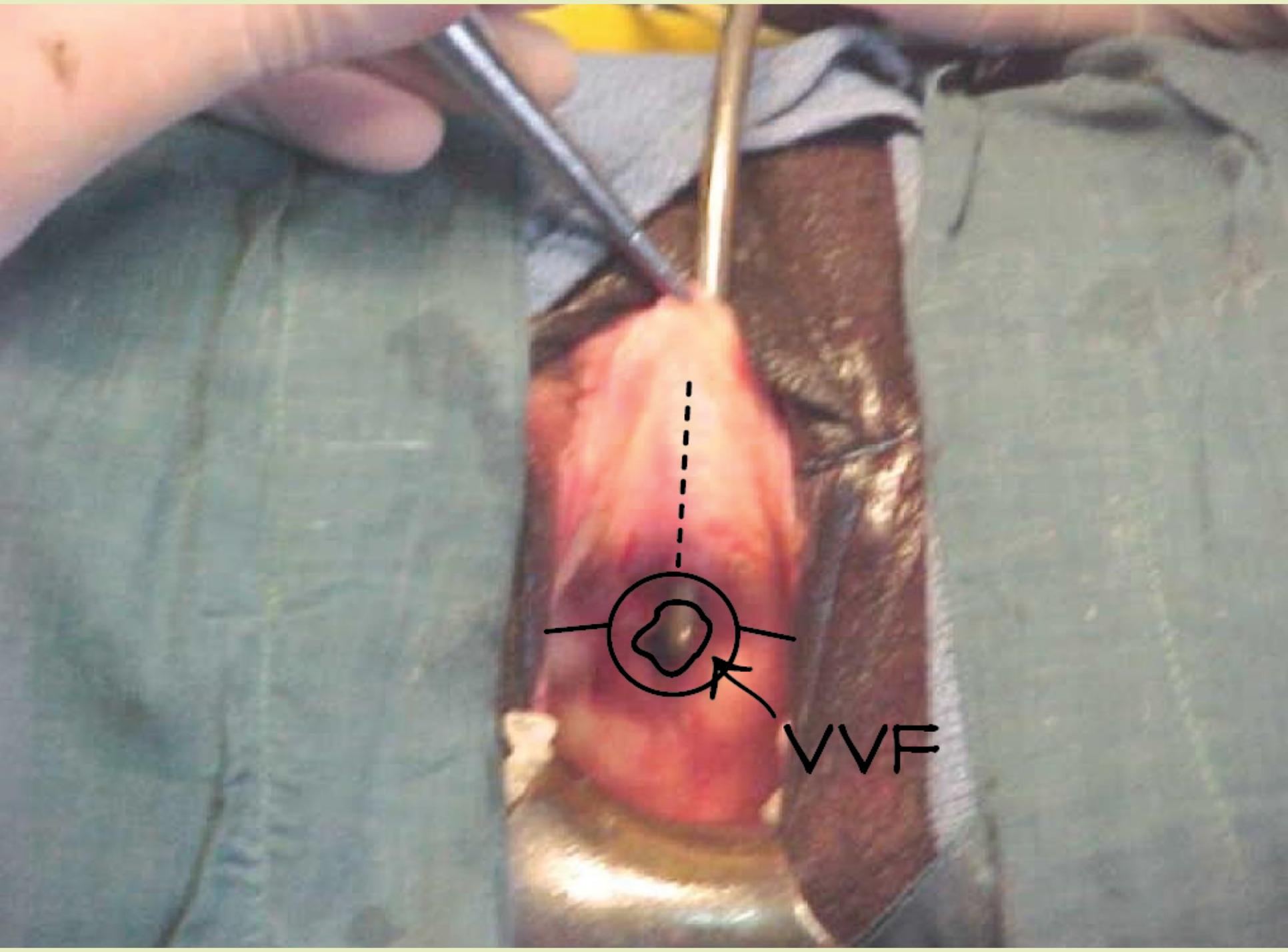
Midvaginal  
VVF



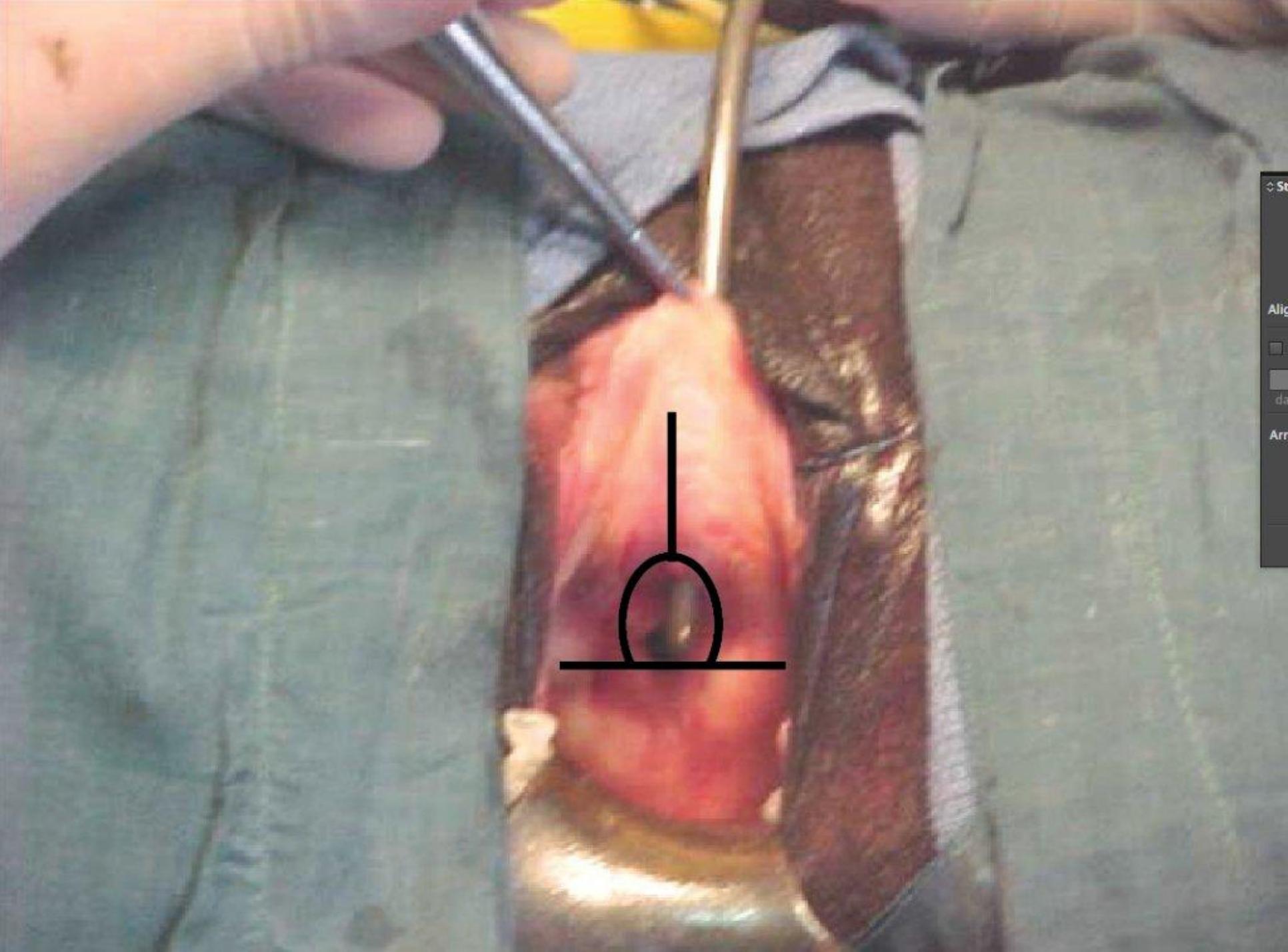


Juxtacervical  
VVF





VVF



# Summary of Problem

## WHO, 1991

Obstetric fistula lies along a continuum of problems affecting women's reproductive health, starting with genital infections and finishing with maternal mortality. Because of the disabling nature and dire consequences—social, physical, and psychological—it is the single most dramatic aftermath of neglected childbirth.

Preventing Obstetric  
Vesicovaginal Fistulae:  
A Daunting Task

# VVF and Maternal Mortality

- Closely associated.
- Share etiology (prolonged obstructed labor).
- Interventions to prevent one will prevent the other.
- Interventions to prevent VVF will also positively affect neonatal morbidity & mortality.

# 5 Major Causes of Maternal Morbidity and Mortality (in underdeveloped countries)

- Hemorrhage
- Obstructed Labor
- Hypertensive Crises
- Sepsis
- Complications of Abortion

# Morbidity of Prolonged Obstructed Labor

- VVF
- Total Urethral Loss
- Stress Incontinence
- Hydronephrosis
- Renal Failure
- RVF
- Vaginal Atresia
- Osteitis Pubis
- Rectal Atresia
- Anal Incontinence
- Cervical Destruction
- Amenorrhea
- Pelvic Infections
- Secondary Infertility
- Foot Drop

# Statistics

- 788+ maternal deaths worldwide each day
- 288,000 maternal deaths worldwide each year
- 99.6% of maternal deaths occur in poorly developed countries
- For each case of maternal mortality, there are 30-100 cases of maternal morbidity

WHO, 2010

# Malaysian Air 370

- Disappeared after take off on 8 March, 2014.
- A Boeing 777
- 239 persons died (passengers + crew)
- Made news headlines at least 30 days thereafter and intermittently since.

# Pause and Ponder This...

- The # of maternal deaths daily is the equivalent of 3 Boeing 777 airplanes full of pregnant women crashing every day, with no survivors. When did you last hear this mentioned on Headline News???
- Maternal mortality has been called the “most neglected tragedy of our time.”
- Maternal mortality is the health statistic with the largest disparity between developed and underdeveloped countries. Chance of maternal death is > 100 times greater in underdeveloped countries. This gap is larger even than the gap (between developed and underdeveloped nations) in child mortality.

# Deadly Delays in Emergency Obstetric Care

- A delay in deciding to seek care (They don't know to go).
- A delay in arriving at a suitable health care facility (They have no way to get there).
- A delay in receiving appropriate care (Nothing happens when they get there—care is unavailable, unaffordable, or unacceptable).
  - Thaddeus & Maine, 1994.
  - Funded by Bill & Melinda Gates Foundation.

# They don't know to go

- Delivery is considered normal process
- Women are not decision makers
- Men control the money
- Women fear C. sections
- Cultural taboos
- No skilled attendants to advise
- Fatalistic World View

# They have no way to get there

- No ambulances or emergency transport
- Many villages don't have a single car/taxi
- No navigable roads
- Areas isolated in rainy season (no bridges)
- Transport is cost prohibitive
- No service taxis to nearest hospital

# Nothing happens when they get there

- Advance payment required
- Language/cultural barriers
- Bribes expected
- Lack of skilled personnel
- Fatalistic World View of L & D staff
- Failure of infrastructure
  - No water, No electricity, No sterile supplies

# Inequalities in Healthcare Use

- MD's, especially specialists, are concentrated in capitals and big cities
- Male children are taken to the doctor more
- Male children are selectively fed better
- Female children are taken to the doctor less
- Female children may be selectively more malnourished

# What Interventions Have Been Favored (by governments, NGO's)

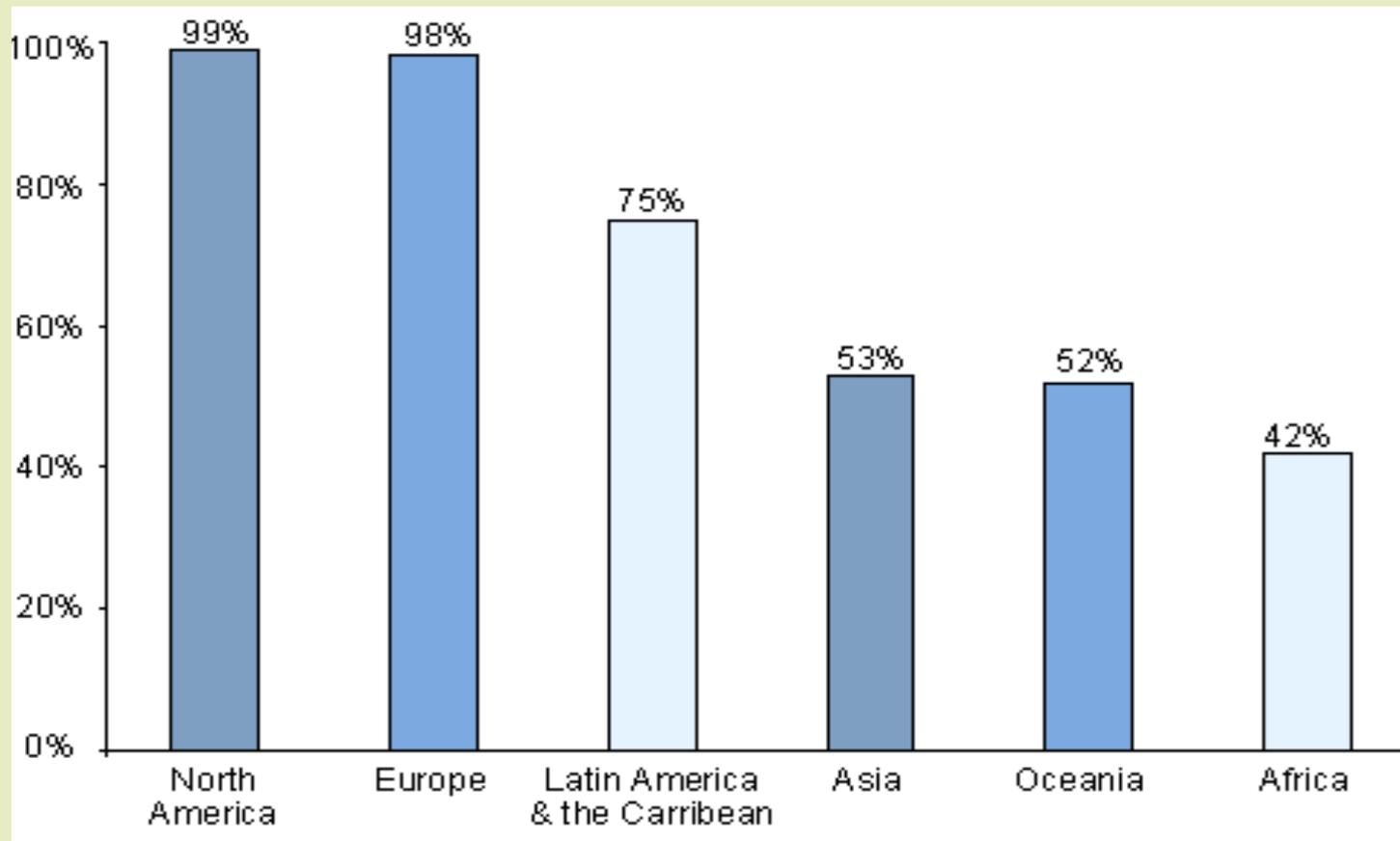
- Training TBA's
  - Jury is still out but of doubtful benefit.
- Antenatal Care
  - Only a very small percentage of delivery complications can be anticipated or prevented.
- Family Planning
  - Demographics from Jos and in general reveal only 5% of village women use family planning though about 50% know about it

# Estimated Deaths Preventable by Various Programs

<b>Program</b>	<b>Death Prevention (%)</b>
Training of traditional birth attendants	3
Antenatal care only	11
Health centers	25
Family planning	26
Health centers and urban hospitals	60
Health centers and rural hospitals	67

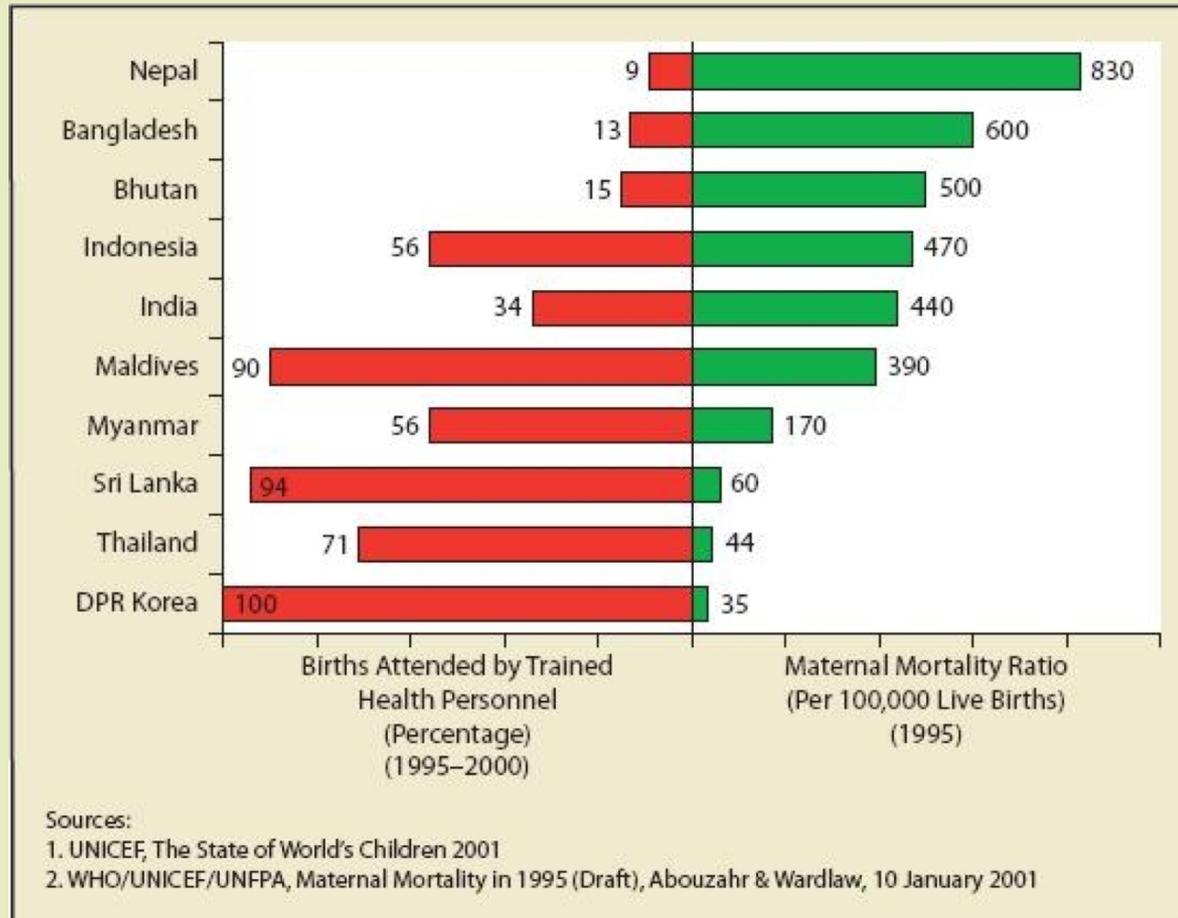
Maine, D. (1991) *Safe Motherhood Programmes: Options and Issues*. New York: Center for Population and Family Health, Columbia University.

# Skilled Attendance at Delivery



Source: "Coverage of Maternal Care: A Listing of Available Information, Fourth Edition". WHO, Geneva, 1997.

# Skilled Attendance at Delivery: Southeast Asia



# What Will It Take

(to really prevent VVF and maternal M & M)

-Competent & Attentive L & D care

available

acceptable

affordable

accessible

-Availability of Safe Cesarean sections

24/7

# 24/7 Essentials for Emergency Obstetric Care

- IV fluids
- Antibiotics
- Blood transfusions
- Oxytocic drugs
- Basic Anesthetic Services
- Basic Surgical Services

# Bottom Line

- There is a strong association between levels of maternal mortality and the proportion of births that are assisted by a skilled health care worker.
- The proportion of births attended by skilled personnel is a key indicator for tracking progress in reducing maternal mortality.

# What Can Be Done?

- **Ensure access to maternal health services**
  - Skilled attendance at all births
  - Basic emergency obstetric care in peripheral units
  - Comprehensive emergency obstetric care in referral hospitals
  - Rapid transport of women in need of special care
  - Postpartum family planning
- **Improve women's status and raise awareness about the consequences of poor maternal health**

# Regards Maternal Morbidity and Mortality

**Its prevention must ultimately lie in a profound change in the status of women. This change must involve, among other things, recognition of women's value, starting with adequate nutrition in childhood and continuing with access to primary education at a minimum. It must include the eradication of harmful traditional practices and raising the age of marriage, giving women other ways of achieving social status than early child bearing. These are long-term goals, not easy to achieved, but vitally important to women's health and lives. WHO, 1991.**

“In an unequal world,  
women are the most unequal  
amongst the unequaled.”

Jaya Rao, 1979

# What Can We Do?/What Can I Do?

- Assist with formation or upgrading of a specialized VVF Center in a needful place.
- Assist with upgrading emergency obstetric services in needful place(s).
- Spread the word
- Encourage government agencies to do more
- Get involved
  - Somewhere
  - Somehow
  - Soon



Meskine, Cameroon; Jan., 2005



**QUESTIONS?**

# References

(2 online books and an article)

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