State of the art in uro-genital istula in Africa

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What is Subsaharan Africa?
Introduction

- Obstetric fistula is one of the most harmful conditions to women in developing countries
- Major public health issue especially in Sub-Saharan Africa and South East Asia
- In under-deserved regions, obstructed labour remains the main cause whilst in developed countries iatrogenic fistulae are more prevalent.
- Affects patient's quality of life
• Surgical repair
  – Exciting and difficult challenge (most complex anatomic types)
  – Aims to stopping urine leakage from the fistula and ensure good continence
  – As much as possible the surgical management should consider preservation of sexual and reproductive function.
Epidemiology

• Worldwide over 2 million cases
• 80-90% in sub-Saharan Africa
• 50-100,000 new cases/yr
• Age: 73% under 20; 35% under 15
• 61% occur during the first pregnancy
• Obstetric fistula > 95%
• Association with RVF > 10%
• «Foot drop»: 14% (lesion to the peroneal nerve)
Epidemiology

- Scant data are available
  - True magnitude of fistula not known

- Existing statistics are often non accurate, non reliable
  - based on medical reports rather than validated community based studies

- Need to improve data collection in order to achieve better estimation of the prevalence of fistula.
Association VVF + RVF
VVF and FGM
Protection with plastic bag
Skin lesions due to urine irritation and
Psycho-social effects:
Isolation and Depression

Young women – poor – vulnerable
Social outcast
Choice of treatment

- Depend on:
  - Type of fistula: No standard classification
    - Many and diverse
      - No standard classification
      - Difficult to set training standard and assessment criteria
      - No possibility to compare series
  - Experience and Skills of the surgeons
    - Best chance to achieve successful repair is to do what one is used to
Criteria to Surgical approach

- Location of the fistula: trigonal or not
- Proximity of ureteric orifices
- Diameter
- Perifistular fibrosis
- Integrity or not of the bladder neck
- Association with RVF or UVF

- Surgeon’s skills and experience
Simple Fistula
Complex cases

• Controversies
  • timing of surgery
  • surgical approach
  • Technique of repair

• Parameters
  • aetiology
  • the anatomical presentation
  • Extent of fibrosis in the pelvic tissues
  • Previous surgical attempt
Complex Fistula
Complex VVF
Complicated cases

• Some cases are beyond anatomic description
  – magnitude of tissue loss
  – vaginal scarring and associated lesions
  – Often surgical attempt from non-skilled hands can add to the complexity and end up to an incurable fistula.
  – In such cases the only alternative is palliative measures like urinary diversion
Very small bladder that cannot accommodate the balloon of the Foley catheter with fistula not closed
Complex VVF + RVF
Colpocleisis
Choice of treatment
Aims of surgical repair

• 1. Closure of the fistula

• 2. Restoration of
  – Continence
  – Sexual function
  – Reproductive function

• 3. Management of complications

• 4. Prevention of recurrence
General surgical principles

- Choice the right timing
- Complete preoperative evaluation
- Good exposure: chose the best approach
- Mobilization of tissue
- Adequate blood supply
- Tension free tissue closure
- Post-operative continuous catheter drainage
Surgical approaches

• Transvaginal
  – Supine position
  – Ventral position

• Abdominal
  – Fistula close to uterine cervix
  – Risk of ureteric lesion

• Combined transvaginal and abdominal
Exposure of the fistula

• Can be facilitated with catheterization of the fistula tract
Surgical repair of a simple VVF
Catheterization of ureteral meatus
Post-operative bladder drainage

• Simple VVF
  – First attempt
  – Tension free closure
  – Bladder catheter : 3 - 7 days

• Recurrent VVF
  – Extensive peri-fistula scar tissue
  – Previous VVF surgery or urethral reconstruction
  – Bladder catheter : 10 – 14 days up to 3 weeks
Advantages of vaginal approach

- Minimal blood loss
- Low postoperative morbidity
- Shorter operative time
- Quicker postoperative recovery time
- Allows use of flap when necessary
Abdominal approach

- Vaginal route inaccessible
- Highly located VVF close to uterine cervix
- When ureteral reimplantation is required
- Use of omentum or peritoneal flap interposition
Urethroplasty in fistula surgery

• Delicate
• One stage flap
  – Vaginal flap
  – Labial flap
vaginal flap
Labial flap
Incontinence after fistula repair

- Importance challenge
- No standard procedure treatment
- Diversity of surgical approach
- Very poor outcome

Procedures

- Pelvic floor exercise: difficult in remote areas
- Slings: very delicate on scar tissue and rigid urethra
- Martius flap
- Urethral suspension + Martius flap
Surgical outcome

• Depend on surgeon’s experience

• 98 % of simple VVF can be cured

• 10 – 15 % of VVF need complex reconstructive procedures or urinary diversion

• Cure is not only closure of the fistula
  – Restauration of the continence system is important along with sexual and reproductive functions
Very complex cases: fistula deemed incurable

- Situation where lesions are severe enough not to allow cure the fistula regardless skills of surgeon
- Usually:
  - complete loss of bladder tissue
  - Vaginal stenosis: colpocleisis
- History of multiple attempts
- Indication of urogenital reconstruction and/or urinary diversion
« Non curable » fistula : The 4 « W »

- **WHEN ?** To conclude a fistula is not curable?
- **WHO?** Is competent to make the decision?
- **WHY ?** What criteria should be used?
- **WHAT ?** To do when a fistula is not curable?
Options

- Psycho-social support
- Economic and social re-integration support
- Management of sexual and reproductive health issues
- Surgical procedures
  - Bladder augmentation with ureteric reimplantation in the intestine segment.
  - Urinary diversion
  - Vaginoplasty
Urinary Diversions

1. Orthotopic substitution
2. Rectal diversion
3. Ileal conduit
4. Cutaneous
Urinary diversion procedures

• Ureterosigmoidostomy : Coffey procedure
• The ileal conduit : Bricker procedure
• The Mainz pouch II
• Continent urinary diversion
  1. Benchekroun : Continent hydraulic valve
  2. Mitrofanoff : Trans-appendicular ureterostomy
Bladder augmentation

- Ileum
  - Camey II

- Colon
  - Sigmoid
  - Ileo-colon
Modified ureterosigmoidostomy: Mainz Pouch II

- Sigma detubularized and reconfigured colon
- Alternative procedure of urinary diversion
Complications of urinary diversion

- Electrolyte disturbances
- Uretero-sigmoid anastomotic stenosis
- Reflux that will increase risk of infection
- Urinary tract infections with pyelonephritis
- Colon neoplasia
- Renal failure
Pre-requisites before urinary diversion

• 1. The fistula is not curable

• 2. Patient must be aware of the benefits, consequences and complications of the proposed procedure

• 3. Patient has constant psycho-social support

• 4. Stoma bags available (external diversion)

• 5. Patient accessible for follow up
What are the challenges?

• “find patients”
  • Often hidden and not aware of treatment opportunities
  • Role of NGO’s and Civil society
• Improve equipment of training centers
• Involve more surgeons and staffs for training and care
• Need for prevention and more targeted reintegration programs
• Sustain funding to support OF programs
What are the opportunities?

• More awareness on OF
  – Governments - Stakeholders
  – NGOs – Civil societies
  – Population : Education and Communication
  – Specialists societies and associations

• International OF Day : May 23

• Availability of a training manual

• Better involvement of local surgeons

• Availability of funding to support OF programs
The future for OF care (1)

**Prevention**
- Improvement of awareness on obstetrical fistula
  - Policy, Public Health, Communication
- Integration of OF in National Reproductive Health plans

**Training**
- Manpower building and development
- Implementation of FIGO and partners training manual
- Improvement of training facilities
Demonstration by instructors
Participants working under supervision
Participants working under supervision
Libreville, Gabon

DAKAR
In Southern Senegal
VVF workshop in district hospital in Kolda, Senegal
Fistula training in Senegal
Fistula training in Kigali, Rwanda
OF workshop in Kigali, Rwanda
In Mendefera, Erithrea
Mansoa, Guinea Bissau

Bissau, Guinea Bissau
The future for OF care (2)

• **Research**
  • Research in collaboration

• **Collaboration**: International partnerships
  • (Societies and Associations, Universities and Colleges, UN agencies, NGOs, ...
PREVENTION
THRU SAFE MOTHERHOOD IS THE WAY
TOWARDS ELIMINATION OF OBSTETRICAL
FISTULA