Results of a retrospective study on clitoral repair surgery in Burkina Faso


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Introduction

- FGM is a real public health problem with serious implications for reproductive health.
  - WHO estimated: 100 to 140 million FGM and nearly three million girls in Africa are at risk of FGM annually
- Prevalence of FGM, 76% (EDSIV) in Burkina Faso
- Reconstructive plastic surgery of the clitoris in Burkina Faso since 2006, a hope for victims of FGM.
- Analysis of our medium-term results and particularly describing the assessment of beneficiaries
Patients and methods

- Retrospective study, Ouagadougou district hospital from 2007 to 2010
- Study population: 120 patients victims of FGM and who underwent reconstructive clitoral surgery
- Inclusion of 94 patients who had a follow-up to 6 months
- Postoperative follow: J10, 1 month, 3 months, 6 months
- Data collection: socio-demographic aspects, excision history, experience of sexuality before and after reconstruction, therapeutic aspects and results of reconstruction
- Reconstruction technique described by Pierre Foldes
- Obtaining informed consent
- Respect for anonymity and confidentiality
Patients and methods

- Classification of FGM

Degree 1 or sunna

Degree 2 = clitoridectomy

Degree 3 ou infibulation
Patientes et méthode

- Surgical technique by Dr. P. FOLDES
  - General anesthesia: 96.8% (n = 91)
  - Loco regional anesthesia: 3.2% (n = 3)
  - Resection of the scar
  - Release of the knee and the body of the clitoris
  - Preservation of the innervation and vasculature
  - Attaching the clitoris
  - Operating time: 30 to 45 minutes

- Education of patients for postoperative care for themselves

[Anatomy of the clitoris - O’Connell HE, Sanjeevan KV, Hutsom JM, Department of Urology, NeuroUrology and Continence Unit, Royal Melbourne Hospital, Victoria, Australia]
What about the surgical technique?
Step 1: prepubic incision

- The excised area sometimes appears as a smooth wall with no protrusion or infibulation

Direct Incision
Step 1: prepubic incision

- The excised area is sometimes carries an irregular scar or keloid, scars of a gesture made without aseptic or hemostasis resection
Step 2: Section of the suspensory ligament of the knee and clitoral release

- Remove the vulval triangle
- Release of the clitoral knee practiced very close to the periosteum, and follows a divergent bifurcation leads to the clitoral body, which goes down the branches ischio pubic
Step 3: Liberation of the clitoral body

- A full release is achieved by a continuation of the dissection along the ischiopubic branch, gradually releasing the body, which often reaches 8 cm.
Step 4: scar resection

- Remove scar tissue and look back a healthy cuts of corpora cavernosa normally innervated and vascularized, so as to reconstitute a functional neo-clitoris
Step 4: scar resection

- The cuts in safe area reveals the corpora cavernosa to the median raphe
- Make a good hemostasis
Step 5: Clitoral repair and relocation

- Preserving the dorsal pedicle
- Reconstruct the clitoris by separate points by rapid absorption over 4 or 5/0, by backing the two tightly albugines
Step 5: Clitoral repair and relocation

- Reposition the glans restored to its normal situation
- Matching of bulbo cavernosa muscles so as to avoid re ascension of the gland
Step 6: coverage and skin closure

- Relocate the neoclitoris without additional coverage
Step 6: coverage and skin closure

- Simple points without drainage on the skin
- Subcutaneous infiltration of a local anesthetic (Naropein + clonidine)
Following

- Monitoring and evaluation
  - cosmetically (appearance, scarring)
  - sensorially (disappearance of pain, sensitivity)
  - sexually (appearance of potential orgasmic stimulation)
  - psychologically
RESULTS
Sociodemographics characteristics

- Mean age 32.3 years [18-49] The slice 30 to 39 years: 40.4%
- Wage income: 45.7%, 42.6% higher level of education
- Marital life: 54.3% (n = 51), single / living alone: 45.7% (n = 43)
- Consent of the spouse among married women: 78.7% had the approval of their spouse for the surgery
- Christian: 62.8% and 37.2% Muslim
History of FGM

- Age at the time of FGM: 1 to 20 years for those with a memory either itself or parents
- FGM 5-14 years: 41.5% (n = 39), MGF <2 years of age: 30.8%
  No memory: 8.5%
- Depending on the degree of FGM
  - FGM 2nd degree: 94.7% (n = 89)
  - FGM 3rd degree: 5.3% (n = 5)
- Reasons given by patients:
  - Custom: 60.8% (n = 73);
  - Religion: 17.5% (n = 21);
  - create a frigidity: 12.5% (n = 15)
Experience of sexuality before the reconstruction of the clitoris

Sexual desire before surgery

**Désir sexuel avant l'intervention**

- **Always** (Toujours): n=3 (3.2%)
- **Very often** (Tres souvent): n=14 (14.9%)
- **Often** (Souvent): n=38 (40.4%)
- **Never** (Jamais): n=39 (41.5%)

**Percentage (%)**

0 5 10 15 20 25 30 35 40 45
Experience of sexuality before the reconstruction of the clitoris

Clitoral pleasure before surgery

- Orgasm without restriction (Orgasme sans restriction): n=8 (8.5%)
- Restricted orgasm (Orgasme restreint): n=4 (4.2%)
- Pleasant without orgasm (Plaisant sans orgasme): n=12 (12.8%)
- Sensation discrète (Discret sensation): n=19 (20.2%)
- Jamais (never): n=51 (54.3%)
Experience of sexuality before the reconstruction of the clitoris

- Dyspareunia
  - Absence of dyspareunia: 60.6% (n = 57)
  - Superficial dyspareunia 5.4% (n = 5)
  - Dyspareunia presence: 17% (n = 16)
  - Deep dyspareunia: 17% (n = 16)
- The reasons for the request
  - Frigidity: 40.6% (n = 38);
  - Dyspareunia: 26.6% (n = 25);
  - Restoration of the anatomy of the clitoris: 25.8% (n = 24);
  - Other: 7% (n = 7)
The patients were aware of the practice of plastic surgery reconstruction of the clitoris with the following channels:

- Media: 43.6% (n = 41)
- The entourage: 29.8% (n = 28)
- Caregivers: 26.6% (n = 25)
Postoperative anatomical result at day 0

Aspect of new clitoris at Day 0
Postoperative anatomical result at day 10

- 6 cases of hematoma
- 10 infections treated with empiric antibiotic therapy
- 6 cases of desertion skin sutures
- 4 cases of recovery sutures
2 cases of delayed epithelialization, insomnia

Aspect of new clitoris at day 30
Gland highly vascularized, and early epithelialization
Postoperative anatomical result at 3 months

Aspect of new clitoris at 3 months
Postoperative appearance at 3 months, with gradual epithelialization of the clitoral glans, centripetal
Postoperative anatomical result at 6 months

Aspect of new clitoris at 6

- Almost complete healing
- 1 case of hyperesthesia
- 1 case of keloid scar on pre pubic
- The temporary inability to work was average 13.7 days [1-60]
- Pigmentation of the clitoris was total in 52 cases or 55.3% and partial in 42 cases or 44.7%
Evaluation of the results after healing

- Esthetics aspects
  - Satisfied patients: 71.3% (n = 67)
  - Dissatisfied patients: 28.7% (n = 27)

<table>
<thead>
<tr>
<th>Anatomy of new clitoris</th>
<th>n</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Palpable but not visible</td>
<td>4</td>
<td>4.3</td>
</tr>
<tr>
<td><strong>Protruding clitoral visible</strong></td>
<td>38</td>
<td>40.4</td>
</tr>
<tr>
<td>Gland exposed without cap</td>
<td>49</td>
<td>52.1</td>
</tr>
<tr>
<td>Clitoris and hood near normal</td>
<td>3</td>
<td>3.2</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>94</td>
<td>100</td>
</tr>
</tbody>
</table>
• Sexual desire after reconstruction of the clitoris

Evaluation of the results after healing

- **Toujours** (always): n=10 (10.6%)
- **Très souvent** (very often): n=30 (31.9%)
- **Souvent** (often): n=49 (52.1%)
- **Jamais** (never): n=5 (5.4%)
The study of the existence of orgasmic events before and after the reconstruction of the clitoris showed that the difference was not significant.
Evaluation of the results after healing

- Patients met the physical integrity of the clitoris: 100%
- Of these, 98.9% (n = 93) would recommend the procedure to their female entourage mutilation victim
- 91.5% (n = 86) would do it again if the intervention had to be rebuilt
Discussion
Assessment of pain before plastic surgery of the clitoris

<table>
<thead>
<tr>
<th>Pain</th>
<th>Ouaga 2010</th>
<th>Foldès 2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>No pain</td>
<td>60.6%</td>
<td>49%</td>
</tr>
<tr>
<td>Light embarrassment during sex</td>
<td>5.4%</td>
<td>12%</td>
</tr>
<tr>
<td>Moderate pain during sex</td>
<td>17%</td>
<td>17%</td>
</tr>
<tr>
<td>Strong pain to intolerable</td>
<td>17%</td>
<td>8%</td>
</tr>
<tr>
<td>Pain outside sex</td>
<td>-</td>
<td>4%</td>
</tr>
<tr>
<td>NA</td>
<td>-</td>
<td>0.06%</td>
</tr>
</tbody>
</table>
### Assessment of pain before plastic surgery of the clitoris

<table>
<thead>
<tr>
<th>Clitoral pleasure</th>
<th>Ouaga 2010</th>
<th>Foldès 2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>54.3%</td>
<td>38%</td>
</tr>
<tr>
<td>Discrete sensation</td>
<td>20.2%</td>
<td>21%</td>
</tr>
<tr>
<td>Pleasant without orgasm</td>
<td>12.8%</td>
<td>38%</td>
</tr>
<tr>
<td>Orgasm restricted</td>
<td>4.2%</td>
<td>2%</td>
</tr>
<tr>
<td>Orgasm without restriction</td>
<td>8.5%</td>
<td>0.4%</td>
</tr>
<tr>
<td>NA</td>
<td>-</td>
<td>1.1%</td>
</tr>
</tbody>
</table>
## Anatomical Evaluation after clitoral repair

<table>
<thead>
<tr>
<th></th>
<th>Ouaga 2010</th>
<th>Angers 2009</th>
<th>Foldès 2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>No change</td>
<td>0%</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>Palpable but not visible</td>
<td>4.3%</td>
<td>10.3%</td>
</tr>
<tr>
<td>2</td>
<td>Visible protruding clitoris</td>
<td>40.4%</td>
<td>30.2%</td>
</tr>
<tr>
<td>3</td>
<td>Gland exposed without cap</td>
<td>52.1%</td>
<td>37.9%</td>
</tr>
<tr>
<td>4</td>
<td>Aspect near normal</td>
<td>3.2%</td>
<td>21.6%</td>
</tr>
<tr>
<td>5</td>
<td>NA</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
### Evaluation of Sexuality

<table>
<thead>
<tr>
<th></th>
<th>Ouaga 2010</th>
<th>Angers 2009</th>
<th>Foldès 2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 Pain</td>
<td>1.1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>1 Discomfort, embarrassment</td>
<td>1.1</td>
<td>0.9</td>
<td>3</td>
</tr>
<tr>
<td>2 Small improvement</td>
<td>5.3</td>
<td>1.7</td>
<td>19</td>
</tr>
<tr>
<td>3 Strong improvement without orgasm</td>
<td>14.8</td>
<td>11.2</td>
<td>32</td>
</tr>
<tr>
<td>4 Orgasmic ability</td>
<td>36.2</td>
<td>43.1</td>
<td>29</td>
</tr>
<tr>
<td>5 Normal sexuality</td>
<td>38.3</td>
<td>27.6</td>
<td>14</td>
</tr>
<tr>
<td>NA</td>
<td>3.2</td>
<td>13.8</td>
<td>3</td>
</tr>
</tbody>
</table>
What issues?

- Women's rehabilitation in terms
  - Legal, anatomical, sensory, sexual, psychological
- Excision convicted in Burkina Faso
  - Not related to ethnicity or religion
  - Secular state who said no to excision
- Clitoral repair is well accepted
What issues?

- Story of a woman fiftieth among many other:
  - «Dr, I was mutilated at the age of 13 and I remember like it was yesterday! Because of this mutilation, I almost did not get married. Since I saw frustration in everyday life. If you repair my clitoris, even if I die the next day I will be buried whole because I feel very incomplete!».
What issues?

- Another woman said:
  - «Dr, my husband divorced after ten years of marriage because I was mutilated and it did not suit him...».

- Among the women repaired, we hold:
  - «Dr, you changed my life! I saw sensations I had never known ... I became a woman, my sexuality has improved a lot and I live orgasms every respect, something I did not know...».
CONCLUSION

- The management of FGM entered an active phase.
- The consequence of these developments is a greater awareness of the possibilities of repairing the part of victims.
- Numerous publications demonstrate sensory recovery after plastic surgery.
- Medicine can now provide concrete answers in terms of repair and correct the pathology of human origin.
HELP WOMEN TO BE CONFIDENT IN THEMSELVES AND IN LIFE