Out of Eastern Africa: Defibulation and Sexual Function in Woman with Female Genital Mutilation

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ABSTRACT

Introduction. Female genital mutilation (FGM) is defined by the World Health Organization (WHO) as all procedures that involve partial or total removal of the female external genitalia and/or injury to the female genital organs for cultural or any other non-therapeutic reasons.
Aim. Aim of this study was to determine sexual function before and after defibulation using a CO_2 laser in migrant women who had undergone FGM in the past.
Main Outcome Measures. Female Sexual Function Index (FSFI) before and 6 months after defibulation.
Methods. Patients were asked to fill the FSFI before surgery and at 6 months follow-up. Defibulation took place under general anesthetic using a CO_2 laser.
Results. Eighteen patients underwent defibulation in a standardized manner and filled in the FSFI completely. Female sexual function improves after surgical defibulation in the domains desire, arousal, satisfaction, and pain whereas lubrification and orgasm remained unchanged.
Conclusion. Defibulation using CO_2 laser may improve some aspects of sexual function in patients who undergo defibulation but not all. **Krause E, Brandner S, Mueller MD, and Kuhn A. Out of Eastern Africa: Defibulation and sexual function in woman with female genital mutilation. J Sex Med 2011;8:1420–1425.**

Key Words. Female Genital Mutilation; Sexual Function; Defibulation; Laser Therapy; Female Sexual Function Index; Female Genital Removal for Cultural Reasons

Introduction

Female genital mutilation (FGM) is defined by the World Health Organization (WHO) as all procedures that involve partial or total removal of the female external genitalia and/or injury to the female genital organs for cultural or any other non-therapeutic reasons.

FGM is also known as female genital cutting (FGC), female circumcision, or FGM/cutting (FGM/C). The term is almost exclusively used to describe traditional procedures on a minor, which requires the parents' consent because of the age of the girl.

Four types of FGM are described, and WHO-modified typology dated 2007 defines FGM as follows [1]:

- Type I is the partial or total removal of the clitoris and/or the prepuce (clitoridectomy). When it is important to distinguish between the major variations of Type I mutilation, the following subdivisions are proposed: Type Ia, removal of the clitoridal hood or prepuce only; Type Ib, removal of the clitoris with the prepuce.
- Type II is the excision of the clitoris with partial or total excision of the labia minora with or without the excision of the labia majora. When it is important to distinguish between the major variations, the following subdivisions are proposed: Type IIa, removal of the labia minora only; Type IIb, partial or total removal of the clitoris and the labia minora; Type IIc, partial or total removal of the clitoris, the labia minora, and the labia majora.

- Type III is excision of part or all of the external genitalia with stitching of the vaginal opening and is called infibulation with or without the excision of the clitoris. As subdivisions, the following types are proposed: Type IIIa, removal and apposition of the labia minora and Type IIIb, removal and apposition of the labia majora. The heterogeneous Type IV includes pricking, incising, or piercing of the external genitalia, stretching of the clitoris and or labia, cauterization by burning of the clitoris and surrounding tissue, or any other procedure that is performed to cause vaginal narrowing or tightening.

The WHO considers the practice to be violating human, women's, and children's rights; it is illegal in most Western countries.

An estimated 132 million women worldwide have undergone FGM, a procedure commonly practiced in more than 26 countries, mainly in sub-Saharan Africa [2] but also in parts of the Middle East and Southeast Asia; however, because of migration, many women with FGM now reside in Western countries and constitute a significant proportion of the index country's population [3–5], e.g., in Switzerland, there is an estimated number of 6,000 women who underwent FGM in the past.

Women with FGM have specific medical, gynecological, obstetric, and psychological problems that doctors, midwives, and nurses are not usually trained to manage [6,7]. This problem is exacerbated by secrecy and the illegal nature of the procedure. As a result, very little information is available on women with genital mutilation in Western countries. In addition, women with FGM are ashamed of their condition and often do not volunteer that they have undergone this procedure [8]. One of the most important long-term implications for FGM is its association with an increased maternal and fetal mortality during childbirth [9]: Women with FGM are significantly more likely than those without FGM to have adverse obstetric outcomes with the risks being greater with extensive FGM [10].

Impairment of sexual function in women after FGM may be due to psychological trauma, scar tissue formation but also to partial nerve damage [11,12].

Some studies on sexual function in women after FGM have been undertaken and suggest that sexual function in women with FGM is adversely altered but can possibly be improved by defibulation [13,14].

Aim of this study was to determine sexual function before and after defibulation in migrant women who had undergone FGM in the past.

Patients and Methods

This study took place between December 2005 and January 2010 in the University Hospital of Bern, Switzerland.

Patients who had undergone FGM in the past and who addressed the Department of Urogynecology because they wished to be defibulated were asked to participate in this study.

Patients were asked to fill the Female Sexual Function Index (FSFI) questionnaire before surgery and at six-month follow-up. Patients who were unable to communicate in one of the country's languages (French, German, Italian) or English or those who were unwilling to fill in questionnaires were excluded as well as patients with a history of urinary incontinence. All patients gave informed consent for this study.

Analyses were performed only on those questionnaires that were legible and clearly completed.

The FSFI is a brief, self-report measure of female function, which evaluates six different domains of sexual function—desire, subjective arousal, lubrication, orgasm, satisfaction, and pain. It was first described by Rosen in 2000 [15] and is widely used for the assessment of sexual function. This questionnaire is validated in many languages including German, English, Italian, and French.

Defibulation is a surgical procedure that releases the vulva scar tissue, exposes the introitus including the urethra and creates new labia majora.

Patients were counseled preoperatively what to expect, e.g., change in urinary stream and the possibility of a feeling of vaginal "openness" using anatomic pictures.

Surgery was performed under general anesthesia as an in-patient procedure.

Patients received a single-shot prophylactic antibiotic (ampicillin 2 g, GlaxoSmithKline, CH-3053 Münchenbuchsee, Switzerland) intraoperatively; general anesthesia and prophylactic antibiotics are standard procedures in our hospital.

Prior to the application of the CO_2 laser, the clitoris region was palpated to determine whether clitoris tissue was buried under the scar tissue. A Kelly clamp was placed under the scar tissue to delineate the length of the scar. Two Allis clamps were placed at two and ten o'clock to apply light tissue on the side walls and the introitus was opened using the CO_2 Laser (ESC Sharplan, CO_2-