

Urinary and Genital Tract Obstruction as a Complication of Female Genital Mutilation: Case Report and Literature Review

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INTRODUCTION

Female genital mutilation (FGM), previously inappropriately called female circumcision is the partial or total removal of the female external genitalia or other deliberate injury to the female genital organs, either for cultural or non-therapeutic reasons.^[1] The World Health Organization (WHO) estimates that between 100 and 140 million girls and women worldwide are presently living with FGM,^[1] and every year about three million girls are at risk. ^[1] The practice is most prevalent in African countries such as Nigeria, Ethiopia, Sudan, Egypt, and some areas of the Middle East. The practice of FGM has been perpetuated in large part by cultural and religious beliefs. For example, FGM is believed to attenuate sexual desire and thus ensures chastity and fidelity in marriage.

Female genital mutilation has been classified into four types (1–4) by the WHO, depending on the degree of scarification and distortion of the female external genitalia. Type 1 involves excision of the prepuce, with or without total or partial excision of the clitoris. Type 2 involves excision of the clitoris, with partial or total excision of the labia minora. Type 3 involves total or partial excision of the external genitalia, and stitching and narrowing of the vaginal opening (infibulation). Type 4 unclassified, includes several other procedures such as pricking, piercing, or

ABSTRACT

Female genital mutilation (FGM) is the partial or total removal of the female external genitalia or other deliberate injury to the female genital organs, either for cultural or non-therapeutic reasons. This barbaric act is accompanied by a variety of complications ranging from hemorrhage, fracture, infective complications, gynectresia, with its attendant sexual and obstetric difficulties, and death. A 23-year-old girl, with urinary and genital tract obstruction following female genital mutilation (infibulation) is presented. She was managed by elective defibulation, with a satisfactory outcome. Robust health education strategies are needed for the eradication of FGM.

Key words: Female genital mutilation, urinary and genital tract obstruction

incising the clitoris and / or the labia, and also cauterization of the clitoris, cutting the vagina, and any other procedure that can be included in the definition of FGM.^[1] FGM type 1 and 2 are the most prevalent — 80%, while 15% of the FGM is type 3.^[2]

Female genital mutilation may result in immediate complications such as severe pain and bleeding and long-term complications such as: psychological, psychosexual, trauma, infertility, susceptibility to bacterial vaginosis, and genital herpes and obstetric complications including perinatal death.^[1,3-10] All types of FGM have been shown to be associated with complications.

In this report, we present the case of a 23-year-old Nigerian girl, with obstructed micturition and genital tract obstruction, as a complication of Type 3 FGM, with a brief literature review.

CASE REPORT

A 23-year-old undergraduate presented to our urology service with a history of obstructed micturition dating to infancy. She specifically complained of impaired urinary stream and splashing of the urine on her upper thighs during micturition. More recently she noticed she had difficulty with coitus; inability to admit the partners erect penis because of a partially obstructed introitus. She had a normal 28-day menstrual cycle.

Access this article online

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DOI:

10.4103/2006-8808.100360

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On examination she was in apparent good health. Examination of the external genitalia revealed a partially amputated labia majora and minora, with the fused labia minora remnant that completely covered the vestibule, except for a small opening at the posterior fourchette that could barely admit the tip of the index finger. (The external urethral meatus was completely covered and the introitus was partially covered) [Figure 1]. The rest of the physical examination was unrewarding.

Laboratory investigations consisting of urinalysis, complete blood count, and HIV screening were entirely normal.

Operative technique

She had elective defibulation, which consisted of splitting the fused labia minora in the midline superiorly, till the remnant of the clitoris was exposed and freed from the tethering fibrous tissue. The cut edges of the labia minora were sutured together with running sutures of 2-0 chromic catgut and separated by means of gauze dressings, during the healing period, to prevent cross adhesions. She was discharged home on the same postoperative day and reviewed in the Outpatient Clinic on the eighth postoperative day and two weeks later. Her wounds were well-healed and she was voiding freely. At the six-month follow-up— she was happily married and had no further complaints.

DISCUSSION

Although recognized as a form of violation of the rights of young girls and discrimination against women, and despite several international and regional human rights treaties and consensus documents condemning the practice of FGM, the practice is still ongoing in several parts of rural Africa, including Nigeria. The practice has been perpetuated in a large part by cultural and religious beliefs. For example, FGM is erroneously believed to attenuate sexual desire, and thus, ensures chastity and fidelity in marriage. A survey from Gambia shows that 72.9% of Gambian women will like their daughters to undergo FGM.^[1] Another reason is the lack of knowledge regarding the complications of FGM, especially among the healthcare professionals, like nurses and midwives.^[2]

Female genital mutilation is a dangerous practice that is fraught with several complications. All the four types of FGM has been shown to be associated with complications. Immediate health complications include hemorrhage, shock, infectious and psychological consequences, pelvic and femoral fracture, and severe pain.^[3-6] An anesthetic



Figure 1: Clinical photograph of a 23-year-old, Nigerian girl, with type 3 FGM, showing post mutilation fusion of the labia minora; the external urethral meatus is completely covered and the introitus is partially covered

death has been reported in a young girl undergoing FGM in Egypt, warranting the banning of the procedure in that country.^[2] In the long term, chronic pain, infections, keloid formation, sexual dysfunction, primary infertility, birth complications, danger to the new born, and psychological consequences can occur.^[3-9]

Urological complications have also been reported to occur following FGM. In a study by Dirie and Lindmark,^[11] urinary retention, urinary tract infection, and urinary problems were documented. In that study, urinary retention occurred in the first three days after FGM and was attributed to any of the following factors; postoperative pain, irritation of the raw areas by urine, and obstruction of the external urethral meatus by skin flaps or blood clots. In some instances the external urethral meatus was sutured, while closing the vulva. These are early urological complications. In this article we highlight a late urological complication of FGM; the obstruction of the urinary stream by the fused labia minora, following type 3 FGM. During micturition, the urinary stream first impinges on the fused labia minora and then exits through the narrowed opening in the vulva causing urinary splashing around the perineum and upper thighs. Dirie and Lindmark^[10] also documented recurrent urinary tract infections, and according to them, these occurred because the meatus was covered by the infundibulum, causing the vaginal discharge to accumulate and favor the growth of bacteria. Our index patient did not have urinary tract infection at the time of presentation, as evidenced by the negative urine cultures.

Sexual problems have also been reported.^[12] These include difficulties in penetration, dyspareunia, and reduced likelihood of orgasm.^[11] Our index patient presented primarily because of difficulty in penetration, at the point of getting married. This was due to the post FGM fusion

of the labia minora, leaving only a narrow opening in the vulva, which could not admit the erect penis of an adult [Figure 1]. Psychosexual and psychological problems have also been documented. In Egypt Elnashar and Abdelhady found that circumcised women had significantly higher rates of psychological problems than women who were not circumcised.^[13] Others have also found a higher prevalence of posttraumatic stress disorder and sexual health problems among circumcised women.^[1] The sexual difficulty our patient had was quite capable of causing psychological stress. She appeared, however, to be mentally stable, although she did not have an expert psychological evaluation, because the facilities for this were not readily available. After defibulation, she was found to have a normal vagina, and has since been happily married.

Female genital mutilation is also associated with increased exposure to HIV/AIDS.^[2] This has been attributed to several factors such as the use of nonsterile instruments, an increased number of blood transfusions, due to blood loss during surgery, increased anal intercourse due to difficult or painful vaginal intercourse, and tearing of the vagina during intercourse. However, some other studies have found no statistically significant associations.^[2] Our index patient was HIV negative.

Treatment of FGM type 3 is by defibulation. The so-called Gabbar's defibulation surgery^[14] can be done under regional or general anesthesia. It involves incising the fused labia minora to restore the introital opening, with excision of clitoral or epidermoid inclusion cysts, if present. More extensive plastic reconstruction of the external genitalia may be warranted in some instances, but was not necessary in our index patient. Where the clitoris has been amputated, little can be done to restore it, but the remnant of it could be freed from its tethering by fibrous tissue, as was done in the index case. Defibulation can also be carried out using the carbon dioxide laser under culposcopic guidance.^[15] The outcome of surgery is usually satisfactory. Gordon, who has a lot of experience in these surgeries, reports that in 60% of the cases, all natural functions are restored.^[16]

CONCLUSION

Female genital mutilation is a dehumanizing and dangerous practice that needs to be stopped. However, mere legislation is not enough to stop the practice. There is need for a

massive educational campaign on the harmful effects of FGM at all levels, such as; the community level, women's groups, traditional birth attendants, and healthcare professionals. Also adequate psychological, social, and medical support needs to be provided for those who are already victims of this condition.

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How to cite this article: Okwudili OA, Chukwudi OR. Urinary and genital tract obstruction as a complication of female genital mutilation: case report and literature review. *J Surg Tech Case Report* 2012;4:64-6.

Source of Support: Nil, **Conflict of Interest:** None declared.