## General Section

# Clitoral keloids after female genital circumcision in early age

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#### **Summary**

Though the number is on the increase throughout the world each day, an estimated 100 million females worldwide so far are known to have been subjected to genital mutilation. Female genital mutilation (FGM), which is also known as female circumcision (FC), is a life-threatening practice that results in many long-lasting health complications in both women and children's lives, especially in underdevel-oped regions where its practice is carried out under unhygienic conditions by people who lack medical knowledge even without using any anesthesia and equipment. Furthermore, this non-medical practice brings about a number of both immediate and later complications. In addition to causing sexually dysfunctional, the other immediate effects following the circumcision can be bleeding, infections. psychological shock, and not being able to pass urine. Other complications include repetitive infections of urinary tract, urinary genital tract fistula, pelvic pain, sexually dysfunctional, complications during delivery such as bleeding because of tears and cuts, and maternal and fatal morbidity in case of prolonged stages of labour, thus leading to an increase in mortalities. Despite the opposition of World Health Organization (WHO), UNICEF and the efforts of many Civil Works Organisations, along with the legislations of the Governments for its eradication, circumcision is still continuing to be practised in Africa. In this article the authors aimed to present a case of a ten-year-old child who has a two-year history of type 3 circumcision and discuss the complications of female circumcision performed at early ages.

Key Words: Female genital mutilation; Circumcision; Keloids; Clitoral mass; Early age.

#### Introduction

Female genital mutilation (FGM) is a non-medical process that involves intentionally altering, removing or cutting, and then sewing or stapling together female genital organs leading to injuries and complications [1, 2], causing the female genitalia to dysfunction, all of which is done totally because of the rituals and traditions in the communities and not for any medical or therapeutic reasons at all [3]. Although in the countries where it is practised the process is perceived and described as female circumcision, because of its detrimental physical health and psychological consequences, in medical literature the term is labelled as "mutilation" which derives its meaning from the Latin root word "mutylatio" meaning dysfunction, cutting, and removing (female genital mutilation (FGM) [3, 4].

WHO classifies FGM into four groups based on its severity [2-4]: type I – partial or total removal of the clitoris and/or the prepuce (Sunna); type II – partial or total removal of the clitoris and the labia minora, with or without excision of the labia majora (excision); type III – removing part or all of the external genitalia and stitching together of the exposed walls of the labia majora leaving a small hole for passing the urine and vaginal secretions (infibulation); type IV – uncategorized. It involves any other procedures

that circumcise the genitalia (pricking, piercing, cutting or burning).

The age FGM is reported to be mostly conducted in a time from infancy to puberty and adolescence. The practice of FGM (circumcision) is known to be currently practiced in approximately 30 African countries, in a few countries in the Arabian Peninsula, in some communities in South-Eastern Asia, and among the ethnic immigrant communities from these countries in Europe, America, and Australia, where the procedure is kept a secret [2, 5]. In fact, there are also signs that show that female genital circumcision was occasionally practiced in western countries as well throughout history [5].

According to the fact reports published by WHO, about 100-150 million girls and women alive today have been exposed to this practice, 6,000 girls between ages 4-12 in Africa become the victim of this initiative each day, and each year there are two million new practices throughout the world [2, 6]. Although the practice may show variations from one country to another, as it is an illegal practice done secretly; typically, the procedure is carried out by a traditional circumciser using a sharp blade or razor that is not sterilised and without any anaesthesia [7-9].

Pain, loss of blood. and infections are the three most im-



Figure 1. — Clitoral mass in vulvar region.



Figure 2. — Vulvar-clitoral mass.



Figure 3. — Postoperative apperance after cutting the mass in half.

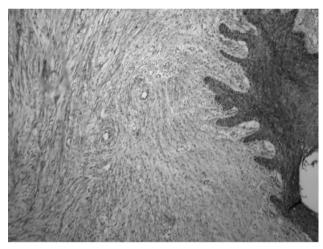


Figure 4. — Histopatolojical view of the clitoral keloid.

portant immediate consequences. The later complications especially as related to type III (infubulation) are infertility, vulvar mass, keloids, vesico-vaginal fistula, and vesico-urethral fistula, menstrual problems, repetitive urinary tract infections, chronic pelvic pain, as well as bleeding and uterine rupture because of insufficient dilation of vagina at prolonged labour of delivery that results in a high risk of maternal morbidity and mortality and death of the baby [10, 11]. A number of studies have also concluded that FGM has adverse effects on circumcised women's sexual life leaving them feeling inadequate at intercourse [12, 13].

## **Case Report**

A ten-year-old female child is referred to the present clinic with symptoms of vulvar mass, pruritus, dysuria, and groin pain. On physical examination; irregular shaped dark colored 5x6 cm gross soft tissue mass was detected (Figures 1 and 2). The authors were informed that she was type 3 circumcised two years ago by village midwife. The mass seemed to become larger on a daily basis after the intervention and also included pruritus. The patient was prepubertal as only pubic hair was observed and menarche was not achieved. The mass was completely excised (Figure 3). Keloid was diagnosed after the pathological assessment (Figure 4). The patient was discharged 24 hours after the operation. Complete healing of outer genital region along with normal urine outflow was observed in control examination one month after the surgery (Figure 5).

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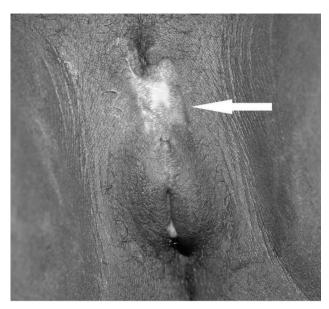


Figure 5. — Vulvar area after operation.

#### Discussion

Currently, over 125 million women throughout the world living in particular in 29 African countries and an even higher percentage of females in the Middle East have been subjected the practice of FGM. Likewise, in the UK 66.000 circumcised women in 2001 and 50.000 women in France in 2004 with circumcision are reported to exist [14]. The age at which girls undergo FGM/circumcision is mostly reported as before reaching 12 years old [1,2,3].

Though historically there have been references to its existence in Ancient Egypt, no one actually knows when, how or why FGM/circumcision began, Yet, it is important to note that there have been no medically documented justifications that show the benefits of this practice for the purpose of enhancing woman's health.

FGM/circumcision is considered by WHO as an assault of the human rights of women and girls, since the practice deprives them of experiencing their sexuality, and its detrimental psychological and psychosexual life long effects on their sexual life have been examined in many studies. A psychotherapist and social activist, Leila Hussein, is an example that shows the seriousness of this non-medical practice. In her account of the report to the guardian, she stated that she recalled every single detail: she was cut when she was seven years old. Four women held her down as she felt every single cut. She was screaming so much that she had blacked out [15].

Girls who have not been circumcised are considered sexually active and they are labelled as "ghalfa" which is used to describe a woman who is sexually free and not respectful, who has the potential to not show fidelity to her family. So such girls would be a target for abuse in their schools and social environments [14]. Since uncircumcised young girls are thought to be sexually active, they could be abused by men who would force them to engage in sexual intercourse. Thus, in order to prevent their daughters from this kind of abuse, families choose to have their daughters circumcised for concerns of virginity when their daughters get married.

In the French study of Allah et al. of 2013, 149 keloidal lesions were detected in 98 patients. 96% of the cases were of African origin. The incidence reported was 20.4% under the age of 18 years and 65.3% in adults. Trauma was detected as the most common etiologic factor, leading to other causes such as infection, burns, and previous surgery [16]. Most common referring reason was an esthetic concern. All of the patients had undergone complete excision but all had recurred. In conclusion they thought that keloidal lesions were not homogenous pathologies. Its high incidence among African origin populations can be related with type 1 collagen production in dermis along with some other increased immunologic factors. In another study of dermatologists in 2011 in USA [17], high incidence of female circumcision among populations who immigrated from African and Arab countries was found to be correlated with keloid, vulvar cyst, and vulvar abcess. It was stated that the dermatologist has an important role in treatment and prevention of diseases caused by female circumcision [17].

In USA female circumcision is especially forbidden by state laws under the age of 18 years [17]. In case series of Arbesmann et al. in 1993 reported that bleeding, infection, and colloid formation were the most common complications among 12 Somalian women immigrated to America. They mentioned further studies with larger number of cases needed [18]. In the case presented by Gurunluoglu et al. in 1999, eight-cm gross vulvar mass in an eight-year-old child was diagnosed with keloid caused by trauma. They mentioned trauma can be an other etiologic factor apart from circumcision among African-Asian origin women [19]. In the study of Kaplan et al. in Gambia, which included long-term follow up of 588 circumcised women, reported significantly high rates of dysmenorrhea, vaginal bleeding, dyspareunia, vulvar cyst, keloid, and infection in these patients also had a four-fold greater risk of materno-fetal morbidity. Social and informative meetings were planned following these results [20].

### Conclusion

Although it is forbidden in some populations, female circumcision is still being performed in children. It causes disturbances in sexuality and increases materno-fetal complications. Further studies containing more informative data are required as a precaution for this practice.

#### References

- [1] "Female genital mutilation. Council on Scientific Affairs, American Medical Association". *JAMA*, 1995, *274*, 1714.
- [2] Female Genital mutilation: "WHO Technical Working Group Meeting". Geneva, 1995. Available at: http://www.fgmnetwork.org.
- [3] Kiragu K.: "Female genital mutilation: a reproductive health concern". Popul. Rep. J., 1995, 41, 1.
- [4] Black J.A., Debelle G.D.: "Female genital mutilation in Britain". BMJ, 1995, 310, 1590.
- [5] "ACOG committee opinion. Female genital mutilation. Number 151--January 1995. Committee on Gynecologic Practice. Committee on International Affairs. American College of Obstetricians and Gynecologists". *Int. J. Gynaecol. Obstet.*, 1995, 49, 209
- [6] Macready N.: "Female genital mutilation outlawed in United States". BMJ, 1996, 313, 1103.
- [7] "International Planned Parenthood Federation IMAP statement on female genital mutilation". Statement developed by the International Medical Advisory Panel (IMAP) in November 1991, amended by the Panel in October 2001, London. Available at: http://www.ippf.org
- [8] Kandil M.: "Female circumcision:limiting the harm". Version 2. *F1000Res.*, 2012, *1*, 23.
- [9] Shah G., Susan L., Furcroy J.: "Female circumcision: history, medical and psychological complications, and initiatives to eradicate this practice". Can. J. Urol., 2009, 16, 4576.
- [10] WHO study group on female genital mutilation and obstetric outcome, Banks E., Meirik O., Farley T., Akande O., Bathija H., Ali M.: "Female genital mutilation and obstetric outcome: WHO collaborative prospective study in six African countries". *Lancet*, 2006, 367, 1835.
- [11] Almroth L., Elmusharaf S., El Hadi N., Obeid A., El Sheikh M.A., Elfadil S.M., et al.: "Primary infertility after genital mutilation in girlhood in Sudan: a case control study". *Lancet*, 2005, 366, 385.
- [12] Catania L., Abdulcadir O., Puppo V., Verde J.B., Abdulcadir J., Ab-

- dulcadir D.: "Pleasure and orgasm in women with female genital mutilation/cutting (FGM/C)". *J. Sex Med.*, 2007, 4, 1666.
- [13] Utz-Billing I., Kentenich H.: "Female genital mutilation: an injury, physical and mental harm". J. Psychosom. Obstet. Gynaecol., 2008, 29, 225.
- [14] UNICEF: "Female Genital Mutilation/Cutting: a statistical overview and exploration of the dynamics of change", 2013. Available at: http://www.unicef.org/publications/index\_69875.html
- [15] "Ending female genital mutiliation in the UK". Lancet, 2013, 382, 1610.
- [16] Allah K.C., Yeo S., Kossoko H., Assi Djè Bi Djè V., Richard Kadio M., Keloid scars on black skin: myth or reality. *Ann. Chir. Plast. Esthet.*, 2013, 58, 115. [Article in French]
- [17] Dave A.J., Sethi A., Morrone A.: "Female genital mutilation: what every American dermatologist needs to know". *Dermatol. Clin.*, 2011, 29, 103.
- [18] Arbesman M., Kahler L., Buck GM.: "Assessment of the impact of female circumcision on the gynecological, genitourinary and obstetrical health problems of women from Somalia: literature review and case series". Women Health, 1993, 20, 27.
- [19] Gürünlüoğlu R., Doğan T., Numanoğlu A.: "A case of giant keloid in the female genitalia". Plast. Reconstr. Surg., 1999, *104*, 594.
- [20] Kaplan A., Forbes M., Bonhoure I., Utzet M., Martín M., Manneh M. et al.: "Female genital mutilation/cutting in The Gambia: long-term health consequences and complications during delivery and for the newborn". Int. J. Womens Health, 2013, 5, 323.

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