

Long-term Complications of Female Genital Mutilation - Clitoral Epidermoid Inclusion Cyst

Kadın Genital Sünnetinin Uzun Vadeli Komplikasyonları - Klitoral Epidermoid İnküzyon Kisti

Hilal Aktürk¹, Mustafa Cengiz Dura¹, Berk Gürsoy¹, Waseem Alsalamini², Selma Ermin³

¹University of Health Sciences Turkey, İstanbul Bakırköy Dr. Sadi Konuk Training and Research Hospital, Clinic of Obstetrics and Gynaecology, İstanbul, Turkey

²Al-Quds University, Abudis, PSE

³Kastamonu Training and Research Hospital, Clinic of Obstetrics and Gynaecology, Kastamonu, Turkey

Abstract

This case study critically examines the long-term detrimental effects of female genital mutilation (FGM), specifically focusing on the development of clitoral epidermoid inclusion cysts. The study illuminates the often-overlooked post-mutilation complications that extend beyond immediate physical trauma, encompassing significant anatomical alterations with potential psychosocial implications. As a direct consequence of FGM, clitoral epidermoid inclusion cysts represent a physical manifestation of such prolonged complications, contributing to discomfort, potential sexual dysfunction, and an overall decline in quality of life. In an unusual case, a 38-year-old African woman presented with a painful clitoral tumor intermittently draining for three years. The study underscores the urgent need for comprehensive preventive measures, early diagnosis, and effective management strategies in affected populations to mitigate the enduring consequences of this harmful practice.

Keywords: Circumcision, clitoris, clitoromegaly, cyst, epidermal, inclusion

Öz

Bu olgu çalışması, kadın genital sünnetinin (FGM) uzun vadeli zararlı etkilerini kritik bir şekilde ele almakta, özellikle klitoral epidermoid inklüzyon kistlerinin gelişimine odaklanmaktadır. Çalışma, sadece anında fiziksel travmayı değil, önemli anatomik değişiklikleri ve potansiyel psikososyal sonuçları da kapsayan, genellikle göz ardı edilen sünnet sonrası komplikasyonları aydınlatmaktadır. FGM'nin doğrudan bir sonucu olarak, klitoral epidermoid inklüzyon kistleri, rahatsızlık, potansiyel cinsel işlev bozukluğu ve genel yaşam kalitesinde düşüşe katkıda bulunan uzun süreli komplikasyonların fiziksel bir göstergesidir. Olağandışı bir olguda, üç yıl boyunca aralıklarla drenaj yapan ağrılı klitoral bir tümör ile 38 yaşında bir Afrikalı kadın sunulmuştur. Çalışma, bu zararlı uygulamanın süregelen sonuçlarını hafifletmek için etkilenecek popülasyonlarda kapsamlı önleyici tedbirler, erken tanı ve etkili yönetim stratejilerinin acilen gerekliliğini vurgulamaktadır.

Anahtar kelimeler: Epidermal, inklüzyon, kist, klitoris, klitoromegali, sünnet

Introduction

Around 125 million women and girls worldwide have undergone female genital mutilation (FGM)/mutilation (1), which is a common practice, particularly in African nations (2). Epidermal inclusion cysts are the procedure's most common complication (3). In comparison to the face, neck, and trunk, epidermal inclusion cysts are less frequently

observed on the vulva, particularly the clitoris (4). Clitoral epidermal inclusion cysts are unusual and may develop on their own or as a result of trauma, particularly FGM, which can result in the implantation of the follicular epithelium into the dermis (5). Epidermoid clitoral cysts are frequently multicystic and develop gradually; once they reach a size of 5 to 6 cm, their pace of growth slows, but they continue to expand in a chronic environment (6). Their histopathology



Address for Correspondence: Hilal Aktürk, University of Health Sciences Turkey, İstanbul Bakırköy Dr. Sadi Konuk Training and Research Hospital, Clinic of Obstetrics and Gynaecology, İstanbul, Turkey

E-mail: akturkhl91@gmail.com **ORCID ID:** orcid.org/0000-0001-7984-9653 **Received:** 13.11.2023 **Accepted:** 27.12.2023

Cite this article as: Aktürk H, Dura MC, Gürsoy B, Alsalamini W, Ermin S. Long-term Complications of Female Genital Mutilation - Clitoral Epidermoid Inclusion Cyst. Bagcilar Med Bull 2024;9(2):135-138



©Copyright 2024 by the Health Sciences University Turkey, İstanbul Bagcilar Training and Research Hospital. Bagcilar Medical Bulletin published by Galenos Publishing House. Licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 (CC BY-NC-ND) International License.

is distinct from others (7). In addition, even for big cystic lesions, entire mass excision yields better cosmetic and curative results (8).

Patient consent was duly obtained for the publication of this case report on the long-term complications of FGM, including clitoral epidermoid inclusion cysts.

Case Report

An African woman in her 38s arrived with a three-year-old painful, sporadic clitoral tumor. The mass brought on walking difficulties, dyspareunia, and embarrassment. She stated that this lesion had previously undergone three failed operations. The patient had two healthy pregnancies after undergoing Type 3 female genital circumcision at 13.

There were no complaints of episiotomies and no prior history of challenging vaginal birth. He did not have a history of illness or surgery, and he did not usually take any drugs. The patient stated that the tumor naturally subsided six months before his appointment, that the cyst was later medically evacuated, and that it recurred three months ago. The patient's discomfort has diminished since the incision and drainage, but she remains in need of diclofenac A 3x4 cm uncomfortably fluctuating cystic tumor was felt in the patient's clitoral region during a physical examination (Figure 1).

There were no signs of illness, a high fever, or redness on the patient. Surgery was performed on the patient after a soft tissue mass was discovered. A soft, yellowish lump that was easily removed after surgery and originated in the clitoral region was found (Figure 2).

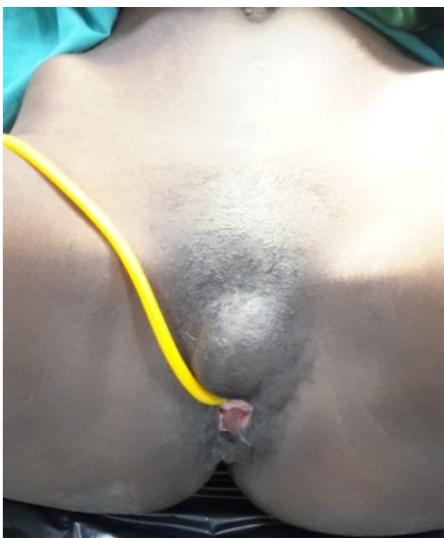


Figure 1. Preoperative inspection clitoral mass

A benign epithelial cyst was identified as the object that had been frozen. There were no signs of malignancy or teratomatous characteristics, such as skin adnexal structures.

A benign squamous mucosa with submucosal edema, chronic inflammation, fibrosis, and mild vascular congestion was found upon histopathological analysis of a paraffin incision (Figure 3).

The patient's surgical procedure was simple, and she was discharged from the hospital with no lasting effects. After excision, eighteen months later, there was no sign of recurrence.



Figure 2. Surgical excision of the clitoral epidermal inclusion cyst

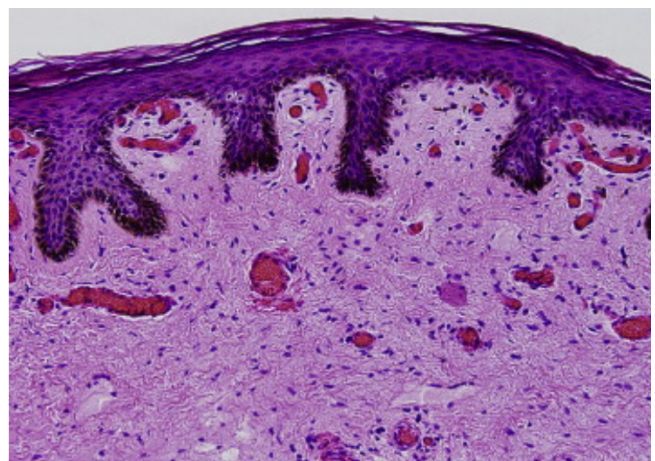


Figure 3. Paraffin block image of inclusion cyst

Discussion

In the shadow of the external genital region, there are pathological variations originating from adjacent anatomical structures (9). A clitoral cyst is one of these, and this case embodies an exceptional and infrequent occurrence. Existing literature contains many case reports concerning clitoral epidermoid inclusion cysts. However, most of these instances typically occur secondary to aesthetic interventions and traumas or are congenital cysts capable of imitating clitoromegaly, rendering the present case distinctively rare (10).

Epidermal or epidermoid cysts, also known as sebaceous cysts, are keratin-filled, subcutaneous cysts originating from hair follicles. These cysts, the most frequently observed type in the clitoris, are encased in epithelial cells and filled with keratin produced by these cells (11). Documentation exists linking these cysts with female genital incision, often referred to as circumcision. Despite their ordinary appearance on the vulva, they typically localize on the labia majora (12). Ritual circumcision in African children and women has led to a notable prevalence of clitoral epidermoid inclusion cysts due to vulvar trauma (13). There have also been rare reports of epidermoid cysts of the clitoris in white-skinned children and women with no history of vulvar trauma.

A singular documented series exists where 32 patients developed cases secondary to FGM. In this series, the mean cyst diameter observed was 4.2 ± 2 cm, and the mean interval from FGM to hospital admission was 5 ± 4 years. Our patient was found to be compatible with the mentioned series.

Enucleation or marsupialization of the cyst and its capsule is typically the treatment of choice. It remains paramount, however, to avoid any trauma to the urethral orifice and surrounding vulvar tissues during this procedure (14). It's equally important to locate and manage bleeding points within the cyst bed, to secure any surplus tissue flap during the excision, and to close the wound effectively, obliterating any dead space (15). Although the primary motivation for performing surgery on a clitoral inclusion cyst is often cosmetic, there are documented cases where large cysts have contributed to sexual difficulties leading to divorce (16).

In 2015, Vella et al. (17) published a review of the effects of FGM on the genitourinary system. Numerous studies have shown that surgical intervention is crucial in the care of FGM victims. The goal is to provide women the chance to enhance their sexuality while restoring normal anatomy.

According to the same study (18), reconstructive surgery performed after FGM was associated with less pain and more recovered pleasure. The results from the one-year follow-up are encouraging. The majority of patients actively report an improvement in their sexual lives, and they note no change or, at the very least, no worsening of pain.

Conclusion

This case study focused on the long-term complications of FGM, specifically a clitoral epidermoid inclusion cyst, illuminates the severe physical, psychological, and sexual consequences of this harmful practice. The delayed diagnosis and treatment of this patient due to a lack of awareness about FGM-associated complications among healthcare providers emphasize the need for improved training in this area. This study also emphasizes the importance of considering the potential negative impacts on women's health when planning treatments. Although satisfactory outcomes were achieved post-treatment in this case, it underscores the need for careful planning and consideration to mitigate harmful health effects for women.

Ethics

Informed Consent: Patient consent was duly obtained for the publication of this case report on the long-term complications of FGM, including clitoral epidermoid inclusion cysts.

Authorship Contributions

Concept: M.C.D., H.A., Design: M.C.D., H.A., Data Collection or Processing: M.C.D., H.A., Analysis or Interpretation: M.C.D., H.A., Drafting Manuscript: B.G., S.E., Critical Revision of Manuscript: B.G., W.A., Technical or Material Support: W.A., S.E., Supervision: M.C.D., B.G., H.A., Final Approval and Accountability: W.A., S.E., Writing: H.A.

Conflict of Interest: No conflict of interest was declared by the authors.

Financial Disclosure: The authors declared that this study received no financial support.

References

1. Female Genital Mutilation. In book: Skin Disorders in Migrants. 2020 p. 191-207.
2. Evans WD, Donahue C, Snider J, Bedri N, Elhoussein TA, Elamin SA. The Saleema initiative in Sudan to abandon female genital mutilation: Outcomes and dose response effects. *PLoS One* 2019;14(3):e0213380.
3. Prasad I, Sinha S, Bharti S, Singh J, Dureja S. Epidermal Inclusion Cyst of the Clitoris: A Case Report. *Cureus* 2022;14(9):e29066.

4. Al-Ojaimi EH, Abdulla MM. Giant epidermoid inclusion cyst of the clitoris mimicking clitoromegaly. *J Low Genit Tract Dis* 2013;17(1):58-60.
5. DiCarlo-Meacham AM, Dengler KL, Snitchler AN, Gruber DD. Clitoral Epidermal Inclusion Cyst Leading to Anorgasmia: A Case Report and Literature Review. *J Pediatr Adolesc Gynecol* 2020;33(3):321-323.
6. Şahin Ö, Varlı EN, Moallim AO, Tolunay HE. A long-term complication of clitoral cyst after female genital mutilation. *Pan Afr Med J* 2023;46:23.
7. Mahmoudnejad N, Mohammadi Torbati P, Zadmehr A. Primary Epidermoid Cyst of the Clitoris in Adult Female Population: Three Case Reports and Introducing a Safe Surgical Approach. *Urol J* 2020;18(3):343-346.
8. Nappal A, Mohan P, Kaur T. Nontraumatic Epidermoid Inclusion Cyst of Vulva in a Young Unmarried Female: A Rare Entity. *JSAFOG* 2014;6(3):173-175.
9. Dura MC, Aktürk H, Sungur GŞ, Alsalamini WOI. A Giant Fibroepithelial Polyp of the Vulva. *Cureus* 2023;15(5):e39152.
10. Birge O, Erkan MM, Serin AN. Case report: epidermoid inclusion cyst of the clitoris as a long-term complication of female genital mutilation. *J Med Case Reports* 2019;13:109.
11. Ibrahimi A, Kallat A. Epidermoid cyst of the clitoris. *Pan Afr Med J* 2021;38:59.
12. Kibar Ozturk M, Zindanci İ, Zemheri E, Çakır C. The largest epidermal cyst with vitiligo lesions following female genital mutilation: a case report and literature review. *Acta Dermatovenerol Alp Pannonica Adriat* 2018;27(4):211-213.
13. Osifo OD. Post genital mutilation giant clitoral epidermoid inclusion cyst in Benin City, Nigeria. *J Pediatr Adolesc Gynecol* 2010;23(6):336-340.
14. Sule ST. Female genital mutilation: The enormity of the problem. *Nig J Med* 1997;6(2):54-56.
15. Linck D, Hayes ME. Clitoral cyst as a cause of ambiguous genitalia. *Obstet Gynecol* 2002;99(5 Pt 2):963-966.
16. Orjii PC, Orisabinone IB. Large Clitoridal Inclusion Cyst Following Female Genital Mutilation/Cutting - A Case Report. *Gynecol Obstet Case Rep* 2020;6:1-3.
17. Vella M, Argo A, Costanzo A, Tarantino L, Milone L, Pavone C. Female genital mutilations: genito-urinary complications and ethical-legal aspects. *Urologia* 2015;82(3):151-159.
18. Restaino S, Pellecchia G, Driul L, Alberico S. Reconstructive surgery after Female Genital Mutilation: a multidisciplinary approach. *Acta Biomed* 2022;93(S1):e2022118.