Magna Scientia Advanced Research and Reviews

eISSN: 2582-9394

Cross Ref DOI: 10.30574/msarr

Journal homepage: https://magnascientiapub.com/journals/msarr/

(RESEARCH ARTICLE)

Check for updates

Clitoridal inclusion cyst as a complication of female genital mutilation in a 7-year-old Nigerian girl

Chidinma Magnus NWOGU [1], Ayodeji Kayode ADEFEMI [2] and Aloy Okechukwu UGWU [3,*]

[1] *Kingswill Advanced Specialist Hospital; Lagos; Nigeria.*
[2] *Lagos State University Teaching Hospital; Ikeja.*
[3] *Lagos University Teaching Hospital; Idi-Araba.*

Magna Scientia Advanced Research and Reviews; 2024, 11(02), 316–319

Publication history: Received on 25 June 2024; revised on 04 August 2024; accepted on 06 August 2024

Article DOI: https://doi.org/10.30574/msarr.2024.11.2.0131

Abstract

Clitoridal inclusion cyst is a common complication of childhood female genital mutilation (FGM) wrong referred to as female circumcision which is still a predominant practice in Sub-Saharan Africa and Asia. Inclusion cyst of the clitoris can present as infants; during childhood or later in life as a complication of FGM. We present a case of a 7-year-old girl with Clitoridal inclusion cyst. She had FGM during infancy in a nursing home in Nigeria. She had enucleation of the cyst with re-fashioning of the external genitalia.

Keywords: Clitoridal inclusion cyst; Female Genital Mutilation; Circumcision

1. Introduction

Clitoridal cyst formation is one of the complications of female genital mutilation (FGM) and usually presents in early childhood [1]. It may rarely present late in adulthood [2]. Post-menopausal Clitoridal cyst long after childhood FGM has been documented [2]. Vulval surgeries or trauma are the risk factors [1,2]. Clitoridal cyst or Clitoridal inclusion cyst represents 5.7% gynaecological cases in a Nigerian southern state occurring as an inclusion cyst due to FGM or cutting, trauma or infections [3,4, 5].

The complications associated with FGM including the occurrence of clitoridal inclusion cyst depend on the extent of the initial genital cutting or mutilation and can occur early following the procedure or it may occur several years later.[6] Inclusion cyst of the clitoris accounts for nearly half of female genital mutilation-related complications [6, 7]. This is related to the high prevalence of female genital mutilation in sub-Saharan Africa and Asia. [2,6, 8]. The reasons behind FGM are purely religio-cultural and superstitious beliefs with no therapeutic basis [2, 5, 7]. These reasons vary from one ethno-religious group to another.[6] It can be present without causing any symptoms because it is a slow-growing tumor.[6]

2. Case

Patient was a 7-year-old girl who had progressive midline vulval swelling in the clitoridal region without any other history of trauma besides a female genital cutting perfumed in infancy. Swelling had been asymptomatic and slow growing. However, her parents decided to bring her for repair on account of cosmetic concern. Details of events surrounding the circumcision was not mentioned besides that it was done by an elderly woman in a nursing home without anaesthesia. Examination showed a painless, midline, mobile and cystic mass extending around the entire clitoridal region.

* Corresponding author: Aloy Okechukwu UGWU https://orcid.org/0000-0003-2405-9720

She had a clitoridal cyst excision using combined conscious sedation and local anaesthetic infiltration. A single midline vertical incision was made on the mass after urethral catheterization to protect the urethra and the cyst dissected and enucleated with haemostasis secured with polyglactin 2/0 suture at the base of cyst. Excess skin was excised, and skin closed with subcuticular polyglactin 2/0 suture. Procedure was well tolerated, and catheter removed after 24 hours and discharged on oral antibiotic and analgesics. Histology was confirmatory of inclusion cyst with presence of cyst wall lined by stratified squamous keratinized epithelial cells.

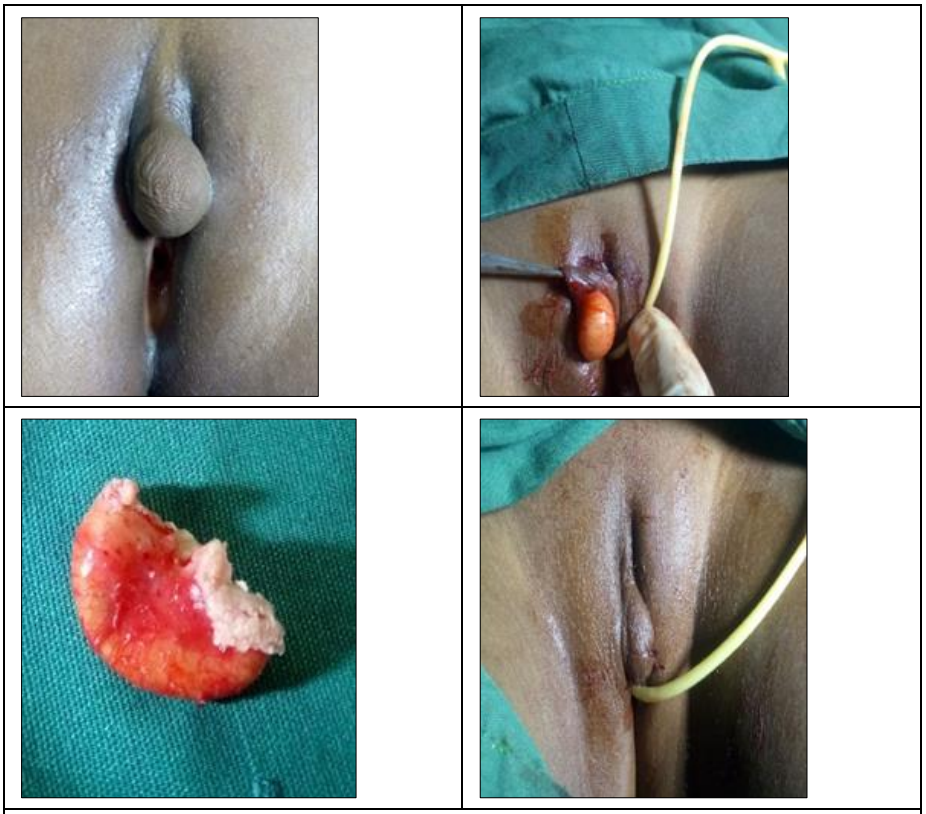

Figure 1 Clitoridal cyst in a vulva devoid of labia majora and minora following FGM, Cyst wall exposure, Excised cyst containing cheesy sebaceous material, Reconstructed labia after clitoridal cyst excision respectively. – *Courtesy- Dr Nwogu*

3. Discussion

Clitoridal inclusion cyst presents mostly as infantile or early childhood complication of FGM or circumcision [5] or infrequently as late complication of female circumcision [4, 9, 10] where it may present many years after and complications varying with severity of the mutilation [4]. Clitoridal inclusion cyst is rare in the absence of a prior circumcision [4, 11]. However, spontaneous occurrences with non-admittance of FGM have been reported [11, 12].

Pathophysiology of clitoridal inclusion cyst is the invagination of active sebaceous-secreting epithelial cells during healing from trauma [4]. Infections from application of native herbal concoctions and mixtures, coupled with use of recycled unsterilized instruments are contributory [7].

It is usually an asymptomatic mass. If large may cause difficulty in urination, walking and sexual discomfort in the sexually active adult. It is usually located in clitoridal region, midline in location, painless, mobile, and cystic in texture and well circumscribed. Other parts of the vulva are usually normal except for any persisting distortion from the predisposing trauma or surgery [1]. Pain may signify complication such as inflammation, secondarily infection and ulceration of a large mass. Malignant transformation and fungal development within the cyst may occur but rare.

Diagnosis is usually clinical. A painless central mass at the clitoridal site which was absent prior to history of circumcision is usual [4]. Histological confirmation is that of a cyst wall lined by stratified squamous keratinized epithelium [4].

Additional investigations such as pelvic ultrasound scan, hormonal assay, karyotype etc will depend on history in order to exclude differentials.

Differential diagnosis of clitoridal inclusion cyst include cysts from nearby glands and ducts such as Gartner's duct cyst, cyst of Skene's glands and cyst of the canal of Nuck. True harmaphroditism, aberrant hormone secretion from adrenal hyperplasia, ovarian and adrenal neoplasms, stromal hyperthecosis, polycystic ovarian syndrome, and exogenous androgen exposure may cause clitoromegally. Clitoral neoplasm is also not impossible [4,13,14].

Indications for treatment are mainly for cosmetic purpose and coital difficulties caused by large cyst [4, 14].

The standard treatment is the surgical enucleation of the cyst and its capsule [4, 13] with excision of redundant skin flap to improve appearance. Complications of treatment include haemorrhage [4], urinary infection, urethral injury and obliteration which can be prevented by operative caution and pre-operative catheterization.

To summarize therefore, it is worth noting that FGM is an oppressive and ancient practice used to control the sexual identities and bodies of women and girls.[15] It is even much surprising that all effort and awareness geared towards stopping the practice of FGM is primarily directed towards traditional genital cutters or elderly community women with little or no effort made towards discouraging the medicalization of this procedure by some health workers.[15]

4. Conclusion

FGM is a predominant practice in Africa and Asia despite new legislations in some countries to the contrary. Women empowerment, education of the girl child and more awareness is required to stop this age long practice thereby preventing the occurrence of these consequences.

Compliance with ethical standards

Acknowledgments

We are also grateful to all our nurses and midwives at Kingswill advanced fertility center, Lagos where this patient was managed for their dedication to duty.

Disclosure of conflict of interest

No conflict of interest to be disclosed.

Statement of ethical approval

This study was approved by the research committee of the Kingswill advanced fertility center Lagos, where this patient was managed.

Statement of informed consent

The authors certify that they have obtained all appropriate patient consent forms for the data to be published.

Guarantor

The corresponding author will act as the guarantor for this manuscript.

Disclaimer (Artificial Intelligence)

We hereby declare that no generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc.) and text-to-image generators have been used during writing or editing of manuscripts.

References

[1] Ibrahimi A, Kallat A. Epidermoid cyst of the clitoris. Pan Afr Med J. 2021; 38(59).

[2] World Health Organisation (WHO). Female Genital Mutilation: Fact Sheet. 2016Last accessed on 2022 Nov 11 Available from: http: https://www.who.int/news-room/fact-sheets/detail/female-genital-mutilation. Accessed August 2 2024.

[3] Albert J, Wells M, Spiby H, Evans C. Examining the key features of specialist health service provision for women with Female Genital Mutilation/Cutting (FGM/C) in the Global North: a scoping review. Front Glob Womens Health. 2024 May 22;5:1329819. doi: 10.3389/fgwh.2024.1329819. PMID: 38840583; PMCID: PMC11150566.

[4] Orji PC, Orisabinone IB. Clitoridal Inclusion Cyst Following Female Genital Mutilation/Cutting- A Case Report. Gynecol Obstet Case Rep. 2020; 6(1): 6.

[5] Klein E, Helzner E, Shayowitz M, Kohlhoff S, Smith-Norowitz TA. Female Genital Mutilation: Health Consequences and Complications-A Short Literature Review. Obstet Gynecol Int. 2018 Jul 10;2018:7365715. doi: 10.1155/2018/7365715. PMID: 30116269; PMCID: PMC6079349.

[6] Ugwu, Aloy Okechukwu, Owie, Emmanue Olamijulo, Joseph Ayodeji, Okorafor, Ugochi Chinenye, Odo Chinenye Cynthia, Okoro, AC. Epidermal Inclusion Cysts of the Clitoris Following Female Genital Mutilation: Case Series and Review of Literature. Nigerian Journal of Experimental and Clinical Biosciences 10(4):p 131-133, Oct–Dec 2022. | DOI: 10.4103/njecp.njecp_20_22

[7] Nzinga AM, De Andrade Castanheira S, Hermann J, Feipel V, Kipula AJ, Bertuit J. Consequences of Female Genital Mutilation on Women's Sexual Health - Systematic Review and Meta-Analysis. J Sex Med. 2021 Apr;18(4):750-760. doi: 10.1016/j.jsxm.2021.01.173. Epub 2021 Feb 19. PMID: 33618990.

[8] [Sarayloo K, Latifnejad Roudsari R, Elhadi A. Health Consequences of the Female Genital Mutilation: A Systematic Review. Galen Med J. 2019 Jan 1;8:e1336. doi: 10.22086/gmj.v8i0.1336. PMID: 34466496; PMCID: PMC8343977.

[9] Kroll G.I, Miller L. Vulval epithelial inclusion cyst as a late complication of childhood female radiational genital surgery. Am J Obstet Gynaecol. 2000; 183(2): 509-510.

[10] Jones L, Danks E, Costello B, Jolly K, Cross-Sudworth F, Latthe P, Fassam-Wright M, Clarke J, Byrne A, Taylor J. Views of female genital mutilation survivors, men and health-care professionals on timing of deinfibulation surgery and NHS service provision: qualitative FGM Sister Study. Health Technol Assess. 2023 Mar;27(3):1-113. doi: 10.3310/JHWE4771. PMID: 36946235; PMCID: PMC10041342.

[11] Buggio L, Facchin F, Chiappa L, Barbara G, Brambilla M, Vercellini P. Psychosexual Consequences of Female Genital Mutilation and the Impact of Reconstructive Surgery: A Narrative Review. Health Equity. 2019 Feb 20;3(1):36-46. doi: 10.1089/heq.2018.0036. PMID: 30805570; PMCID: PMC6386073.

[12] Evans C, Tweheyo R, McGarry J, Eldridge J, Albert J, Nkoyo V, Higginbottom G. Improving care for women and girls who have undergone female genital mutilation/cutting: qualitative systematic reviews. Southampton (UK): NIHR Journals Library; 2019 Sep. PMID: 31532598.

[13] Hughes J.W, Guess M.K, Hittleman A, Yip S, Astle J et el. Clitoral epidermoid cyst presenting as pseudoclitoromegaly of pregnancy. Am J Perinatal Rep. 2013; 3(1): 57-62.

[14] Berg RC, Underland V, Odgaard-Jensen J, Fretheim A, Vist GE. Effects of female genital cutting on physical health outcomes: a systematic review and meta-analysis. BMJ Open. 2014 Nov 21;4(11):e006316. doi: 10.1136/bmjopen-2014-006316. PMID: 25416059; PMCID: PMC4244458.

[15] Editorial. The Lancet. Medicalised female genital mutilation must stop. The Lancet. 2024 Aug 1;404(10451):405–5.