**Case Report** 

**Acquired Clitoromegaly Cyst: Consequence of Persistent Unorthodox Practice in the 21st Century** 

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Received: 02 July 2019; Accepted: 29th July 2019; Published: 26 August 2019

**Abstract** 

Objective: To present case report a patient with clitoral cyst, following type II female genital cutting performed

in childhood, management and literature review.

**Design**: Report of cases managed and review of available current literatures.

Setting: University College Hospital Ibadan.

Patients: The case was a 30 year old Para 2<sup>+0</sup>, 2 alive, known hypertensive, with perineal swelling since

childhood. She presented 30 years later with increasing size of the clitoral swelling associated with pain.

**Management:** Surgical excision of the cyst following thorough evaluation of the patients.

Results: Better cosmetic outcome, vulvar discomfort subsided and improved sexual satisfaction post-operatively.

Conclusion: While a good cosmetic and stoppage of vulvar discomfort can be managed with acceptable

outcomes, these case, again, brings to attention of persistence of unacceptable female genital cutting with

attendant effects even in the 21st century. Also, to let us know that there is need for more and continuous

awareness creation of the need to stop this dehumanizing practice, of female genital cutting, which is of no health

importance, rather numerous adverse sequelae.

**Keywords:** Female genital cutting; Clitoral cyst; Complications

## Introduction

World Health Organization (WHO) defines female genital mutilation (FGM) as "all procedures that involve partial or total removal of the external female genitalia or other injury to the female genital organs for cultural or other nontherapeutic reasons" [1]. Other synonyms are female genital cutting or female circumcision. The time of performance of the procedure varies from time to time depending on the culture of the people. It can be performed in infancy, at the time of initiation into womanhood or just before marriage. The procedure is practiced mainly in African countries, and an estimated 130 million women worldwide have had it done in some form [1]. Annually, over two million procedures of FGM are performed globally [2]. Nigeria as a result of its high population has the highest absolute number of FGM accounting for about a quarter of the estimated 115-130 million women circumcised worldwide. The national prevalence rate of FGM in Nigeria is 41% among adult women [3].

Despite the abundance information of the lack of benefit of this practice and the associated complications, this procedure of female genital cutting is still common in our environment. It is, therefore, our responsibility as health care workers to constantly draw the attention of the public to the observed complications following FGM and its associated emotional, health, social and economic implications. Associated reproductive health sequalae of FGM include haemorrhage with or without shock, infection especially bacterial vaginosis and herpes simplex type-II, [4], obstetrics sequale like pelvic outlet-associated difficult labour, clitoral scarring and cyst formation (clitoral epidermoid inclusion cyst) with resultant psychological and sexual problems [5]. In this report, we describe a case of a multiparous female adult with a histologically confirmed epidermoid inclusion cyst of the clitoris who had a history of type II FGM performed as a neonate.

## **Case Presentation**

This is a case of 30-year old Para 2<sup>+0</sup>, 2 alive woman who presented at the Gynaecology clinic, University College Hospital, Ibadan, Nigeria, with a swelling at the upper part of the external genitalia which she noticed since childhood. There was a history of circumcision in childhood like her other two senior female siblings. She first noticed this as a small clitoral mass as a teenager, with occasional itchy sensations. The patient had never sought any medical treatment for prior to this presentation. A month prior to presentation she noticed progressive increase in size with associated tenderness. There was no swelling in any other part of the body. The patient had been married for 6 years and had no history of dyspareunia, or urinary symptoms. She has had 2 normal full term and spontaneous vaginal deliveries. Both children were alive and well. Patient was a known hypertensive diagnosed in 2013 and managed on Tabs Methyldopa. She had excision of a left breast lump in 2008, with histological diagnosis of fibroadenoma.

The main finding on physical examination was Type II female genital mutilation, a, well-circumscribed, mobile, nontender, round, cystic mass about 8cm x 6 cm on the partially amputated clitoris with no differential warmth (Figure 1). The urinary meatus and vaginal introitus were identified and normal. the labia minora were absent. Labia majora were preserved. Pelvic ultrasound done was reported normal.

DOI: 10.26502/ogr020



DOI: 10.26502/ogr020

Figure 1: Acquired Clitoromegaly Cyst

She was appropriately counseled and scheduled for surgical removal under anaesthesia. Pre-surgery haematological and chemical investigations were normal. She had surgical resection of the mass with aesthetic repair of the vulvar incision under sub-arachnoid block anaesthesia. Intraoperative findings included the presence of a well-demarcated, encapsulated subcutaneous cystic 6cm x 8cm x 10cm mass containing gelatinous material. This was dissected completely from the surrounding structures via a midline incision made on the swelling (Fig. 2). The neurovascular bundle of the clitoral area was spared. After hemostasis, the skin was approximated with a continuous suture, without trimming of the redundant tissues.



Figure 2: Dissection of the Clitoral Cyst

The cystic mass (Fig.3) containing gelatinous materials was sent for histological assessment.



Figure 3: Clitoral cystic specimen

The postoperative period was without any complications. During the follow-up at outpatient clinic one-month post-surgery, there was no complaint. The pathologic examination of the excised clitoral mass showed stratified squamous epithelium with overlying collagenous tissue and containing desquamated keratinous materials. The histopathology conclusion was that of epidermoid inclusion cyst. The follow-up of the patient at the second postoperative visit a month later revealed no recurrence, with a fine cosmetic result. The patient reported complete resolution of her complaints, absence of dyspareunia and satisfactory sexual relationship with her husband. There was no hypertrophic scar tissue on the perineum.

# **Discussion**

Clitoral cyst is an epidermoid inclusion cyst, a slowly growing, intradermal cyst of the clitoris in female, mostly, as a result of female genital mutilation (FGM), a procedure which involves partial or total removal of the external female genitalia, for cultural or non-therapeutic indications [6-9]. The FGM associated clitoral epidermoid inclusion cysts are non-hormonal cause of clitoromegaly [6,10,11]. However, hormonal conditions such as endocrinopathies, masculinizing tumors, exposure to the androgens, pseudo-clitoromegaly due to masturbation, and clitoral neurofibromatosis are the other causative factors in the aetiology of the acquired clitoral enlargement [12]. Spontaneous onset of this clitoral lesion is rare [7]. The inclusion cyst arises from the invagination of keratinizing squamous epithelium within the dermis, accumulation of epidermal desquamations, secretions and other debris in a circumscribed space which becomes cystic and filled with laminated keratin [13]. The formed cyst is often painless and gradually increases in size over time [14].

The WHO has classified female genital mutilation into four types: Type I: Partial or total removal of the clitoris and/or the prepuce (clitoridectomy); Type II: Partial or total removal of the clitoris and the labia minora, with or without excision of the labia majora (excision); Type III: Narrowing of the vaginal orifice with creation of a covering seal by cutting and apposition of the labia minora and/or the labia majora, with or without excision of the clitoris (infibulation); Type IV: Unclassified and described as all other harmful procedures to the female

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genitalia for non-medical purposes. Example of the type IV include ''introcision'' (splitting of the vaginal opening with sharp objects or the fingers), cutting of the vaginal wall or the cervix, pricking or piercing or stretching of the clitoris or the labia, cauterization by burning of the clitoris and surrounding tissue, scraping of the tissue surrounding the vaginal orifice (''angurya'' cuts) or cutting the vagina (''gishiri'' cuts), introduction of corrosive substances or herbs into the vagina to cause bleeding or for purposes of tightening or narrowing it and any other procedure that falls under the definition of female genital mutilation [6]. Types I and II FGM are the most practiced worldwide constituting 80% of cases as seen in our case (Type II FGM), the more extreme type III FGM are commoner in many African countries home to majority of cases of FGM [1,15]. This report describes a case of epidermal clitoral inclusion cyst as a long-term complication of type II FGM in an adult female with latency period of 3 decades. Long term complications of female genital mutilation include chronic pain, infections, inclusion cysts and abscesses (which might be the cause of the pain in this patient), decreased sexual

The clinical presentation of epidermal inclusion cyst of the clitoris usually consists of a silent course with a painless swelling gradually increasing in size [6,7,16]. A soft, mobile, nontender mass in the clitoral region in the absence of any virilization sign is the typical physical finding, which are similar with the findings in our patient.

enjoyment, infertility, posttraumatic stress disorder, urinary dysfunction, and dangers in childbirth [3].

Late presentation, which is the norm, following complications as seen in this case above has been attributed to, essentially, symptomless nature in most cases, ignorance, shame about discussing issues concerning the genital areas, financial constraints and fear of prosecution in countries where female genital mutilation is illegal [10].

Complications associated with clitoral cyst include superficial dyspareunia, urinary disturbances, pain in the vulva, as seen in this case, and infection which may necessitate presentation at the hospital by the patient [17,18].

Management of clitoral cyst is by complete surgical excision. The surgical technique used in our case for removal of the cyst was like in some other cases reported in literature [6-8,19]. The cyst was easily dissected from the surrounding structures through a midline incision made on the overlying skin of the mass. The preservation of the neurovascular bundle was provided during the dissection of this region. Post-operative review showed good healing with satisfactory cosmetic appearance. Other techniques of skin incision include the use of 'reverse V-shaped incision' which is said to omit the necessity for skin trimming [20]. However, this case demonstrated that skin trimming can, also, be avoided in the linear, midline incision approach.

Our patient was an adult, multiparous Nigerian woman with long-standing and large epidermoid cyst from FGM performed as neonates with presentation about 30 years later due to pain, possibly, following an infective process. This case was successfully managed surgically with resolution of symptoms. What was difficult to adequately assessed but has been documented in literature is the associated improved quality of life and spousal relationship following successful outcomes [18]. However, this can be assumed in this case of ours from her

DOI: 10.26502/ogr020

follow-up clinic review that confirmed absence of dyspareunia and satisfactory sexual relationship with her husband.

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#### **Conclusion**

Clitoral cyst is still a common but relatively under reported long-term complication of female genital mutilation in our environment and many other parts of the world. It is important to continue to create awareness amongst women, generally, and ethnic groups that indulge in the practice of female genital mutilation about the myriad of complications both early and late which can arise as a result of this harmful practice. Enlightenment of women about availability of safe surgical procedures for removal of clitoral cyst and need for early presentation is very important. Even at that, stoppage of FGM remains the ultimate because the patients are still at risk of many of the unpredictable, but known, anaesthesia and surgery-related complications that can arise.

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**Citation:** Olutosin Alaba Awolude, Oluyomi Akinyotu. Acquired Clitoromegaly Cyst: Consequence of Persistent Unorthodox Practice in the 21<sup>st</sup> Century. Obstetrics and Gynecology Research 2 (2019): 043-049.



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