

## Introduction

Abnormalities of the clitoris are rare. Acquired non-hormonal clitoromegaly in adults is a very rare occurrence in clinical practice. Its incidence is unknown; this is compounded by the relative paucity about this condition in the published literature.

We hereby describe two cases of enlargement of the clitoris due to a mass that have presented to our Units over the past 24 months. Although the clinical presentations are very similar, the underlying pathologies are very distinct. (1)

### Case 1

A 24 year old Eritrean refugee, otherwise healthy, presented to A&E with fresh vaginal bleeding and severe genital pain radiating to right thigh and lower abdomen. The patient was found to have a large vulval cyst. The cyst had increased considerably in size recently, after the patient had started sexual activity. The pain had increased considerably over the past days and she was unable to walk. She was able to pass urine with some difficulty.

Inspection of the perineum revealed a Type IIc Female Genital Mutilation and a 15cm cystic mass originating from the residual clitoral hood area. The mass was draining proteinaceous material and blood. The urethra was noted to be separate from the mass. Exploration and drainage of the mass in theatre was carried out. At operation the origin of the mass was confirmed. The abscess wall was sent for histology. The histological findings were compatible with a diagnosis of secondary infection of an epidermal inclusion cyst.

The patient experienced an otherwise uneventful recovery and was discharged home on oral antibiotics.



### Case 2

A 45 year old American lady presented with vulval discomfort and sudden growth of a vulval mass. She had no history of genital trauma, including body piercing.

Inspection of the perineum showed a large 8 cm cystic mass arising from the clitoris. The rest of the genital organs had a normal appearance. An MRI scan was carried out to further investigate the origin of this mass, and as an essential tool to plan surgery. At surgery, the cyst was removed intact and a new vestibule was reconstructed, and a clitoroplasty performed.

A definitive diagnosis could not be reached on frozen section, however, after further evaluation by the pathologist, histology revealed a hamartoma of the clitoral hood.



## Results

Clitoromegaly is most frequently associated with congenital malformations and syndromes. These normally present in childhood. Of the adult types, hormonal disturbances are the most common causative factor. These include common hormonal abnormalities such as polycystic ovarian syndrome and adult onset congenital adrenal hyperplasia. (2) Both our patients were healthy adult females with no signs of hormonal disturbances. They both had a normal gynaecological history and regular menses.

Non-hormonal causes of clitoromegaly are very rare. They include neurofibromatosis, and epidermoid inclusion cysts.

**Case 1** illustrates a large epidermoid cyst, which has developed some twenty years after female genital mutilation. A handful of similar case reports have been reported in the literature.

Epidermal inclusion cysts are usually slow growing and relatively asymptomatic.

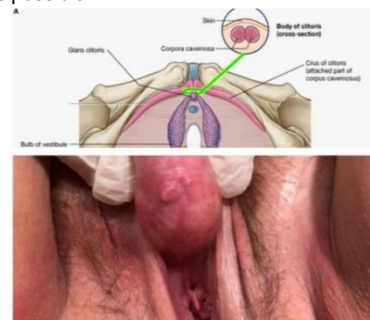
Most of the epidermal inclusion cysts of the clitoris described are either due to female genital mutilation or secondary to trauma. Our case describes a 15cm epidermal inclusion cyst, one of the largest described so far. Surgical excision is indicated to relieve the patient from the obvious physical discomfort, restore cosmesis thus relieving psychological distress, allow for a definitive histopathological diagnosis and to avoid complications such as cyst rupture, infection and rarely, malignancy.

This case highlights the need for increased awareness regarding FGM and its complications especially considering that affected women are unlikely to seek help due to social, ethnic and cultural reasons.

**Case 2** presented with a very similar clinical picture, without history of genital trauma. Idiopathic epidermal clitoral cysts have been described. Histology showed the mass arising from the clitoris to be a hamartoma.

A hamartoma is a benign tumour-like malformation consisting of an abnormal mixture of cells and tissues that are normally found at that anatomical site. It is considered a developmental error. Only 2 case reports of vulval hamartomas have been published so far. This case reaffirms that a hamartoma should be considered in the differential diagnosis of non-hormonal causes of clitoral masses.

This case presented non acutely and further radiological investigations could be carried out. These included an MRI scan to better assess the mass pre-operatively, both in terms of its location in relation to other vulval structures and its possible underlying pathology, and to plan surgery so as to allow for preservation of the sexual function and sensation of the clitoris as much as possible.



## Conclusions

These cases illustrate the diverse aetiology associated with these rare presentations of masses arising from clitoris. Clinical examination should be combined with radiological investigation such as MRI to better assess the mass pre-operatively, and plan surgery.

This abnormality should be studied further to enhance our knowledge of this anatomical area and explore the best therapeutic options.

## References

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2. Sivrioglu N, Copcu O, Oztan Y (2004). "Idiopathic isolated clitoromegaly: A report of two cases". *Reproductive Health*. **1** (1): 4. doi:10.1186/1742-4755-1-4. PMC 523860