International Journal of Medical and Health Sciences

Journal Home Page: http://www.ijmhs.net ISSN: 2277- 4505

Case Report

Leiomyoma of Clitoris, an unusual cause of Clitoromegaly in a post menopausal patient- A Case Report and Review of the Literature

Ajay Chandrasekar*[1] , Devakannan[2] , Thirunarayanan[3]

[1&2]Associate professor, [3]Professor, Department of Surgery, Shri Sathya Sai Medical College Hospital,Thiruporur-Guduvancherry highway,Ammapettai,Nellikuppam,Kanchipuram District,Tamilnadu, India

ABSTRACT:

Clitoromegaly may be congenital or acquired , the former being more common . Acquired Clitoromegaly may be due to endocrine imbalances affecting adult women , polycystic ovarian disease, hyperthecosis, tumours of ovary, clitoral cysts or drug induced. A Leiomyoma of Clitoris causing Clitoromegaly is very rare. We report a case of 60 year old post menopausal women presenting with Clitoral swelling of 4 months duration with ulceration. Investigations revealed a normal karyotying ,her hormonal levels of testosterone ,dehydroepiandrosterone sulphate,follicle stimulating hormone , lutenizing hormone, parathormone and prolactin were normal. Thyroid function tests and X-ray chest were normal. CT abdomen revealed normal adrenals and MRI brain was also normal.24 hours urinary excretion of free cortisol and ketosteroids were normal. Beta HCG levels was also normal. Biopsy taken from the edge of the ulcer was reported as liomyoma. She underwent excision and clitoroplasty with preservation of neurovascular pedicles and the histopathological examination revealed the tumor to be a Leiomyoma of Clitoris,a rare entity presenting as clitoromegaly.

KEY WORDS: Clitoromegaly,Liomyoma,Clitoris.

BACKGROUND:

Clitoromegaly refers to the abnormal enlargement of the clitoris either present since birth or acquired later in life. Acquired clitoromegaly , rare entity compared to congenital types, is caused by wide variety of conditions like polycystic ovarian disease, hyperthecosis, cystic lesions, neurofibromatosis or drug induced. A leiomyoma causing a clitoromegaly is a rare entity. A post menopausal lady with a clitoromegaly with decubitus ulcer is presented here.

CASE REPORT:

60 Year old female patient presented to surgical outpatient department with complaints of a spontaneous swelling in the clitoral region of 4 months duration. She developed an ulcer after scratching at the tip of the swelling. She did not have any other symptoms related to the urogenital system. She attained menarche at the age of 14 years, married at the age of 17 years and her sexual life was good. She delivered 2 daughters by normal vaginal delivery and she attained menopause at the age of 45 years . It was confirmed from her husband that there was no clitoral swelling before 4 months.

On physical examination, her secondary sexual characters were normal, urethra identified separately below the clitoral swelling. Clitoral mass was 8 x 5 cms , base attached to vulva ,non tender ,irreducible ,non compressible without clear demarcation of the clitoris. No inguinal lymph nodes palpated . Investigations revealed a normal karyotying , her hormonal levels of testosterone,Dehydroepiandrosteronesulphate(DHEA), follicle stimulating hormone(FSH) , lutenizing hormone(LH) ,beta- human chorionic gonodotrophin(beta-HCG), parathormone and prolactin were normal. Thyroid function tests and X-ray chest were normal. CT abdomen revealed normal adrenals and MRI brain was also normal.24 hour urinary excretion of free cortisol and ketosteroids were normal. Edge biopsy taken was reported as liomyoma of clitoris.

Under spinal aneasthesia , patient underwent excision of the mass by a elliptical incision including the ulcer. Clitoroplasty with the preservation of the neurovascular pedicles was done. Post operative period was uneventful and patient was discharged on 7th post operative day.

Histopathological examination of the excision specimen came as '*Leiomyoma of the clitoris*'.On microscopic examination, the section of excised mass showed benign capsulated neoplasm containing sheets and fascicles of spindle cells with oval nucleus with occasional capillaries, suggestive of benign clitoral leiomyoma.

Figure 1: Clitoral swelling with decubitus ulcer (black arrow) retracted upwards to visualize the urethral opening(white arrow)

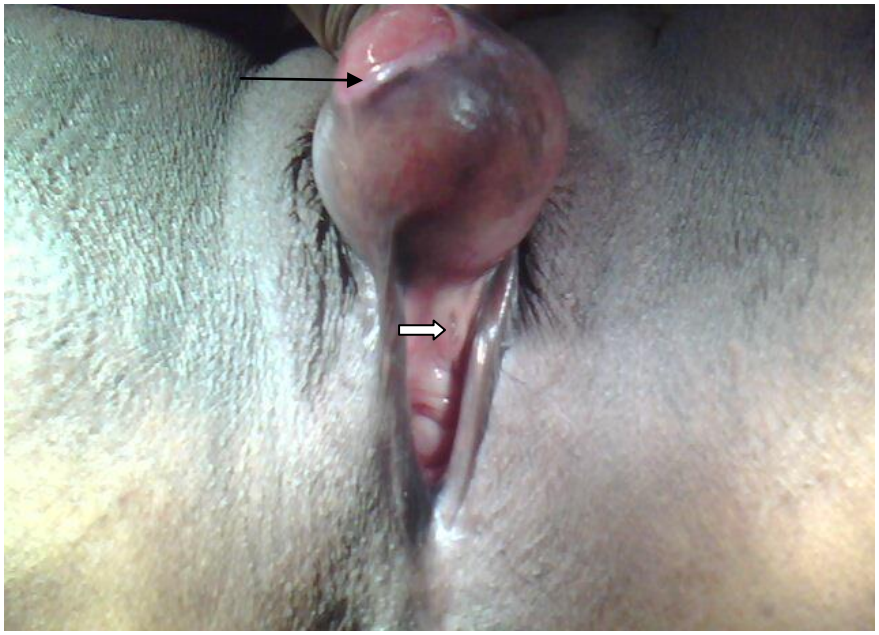


Figure 2: Per operative picture after excision of the clitoral swelling

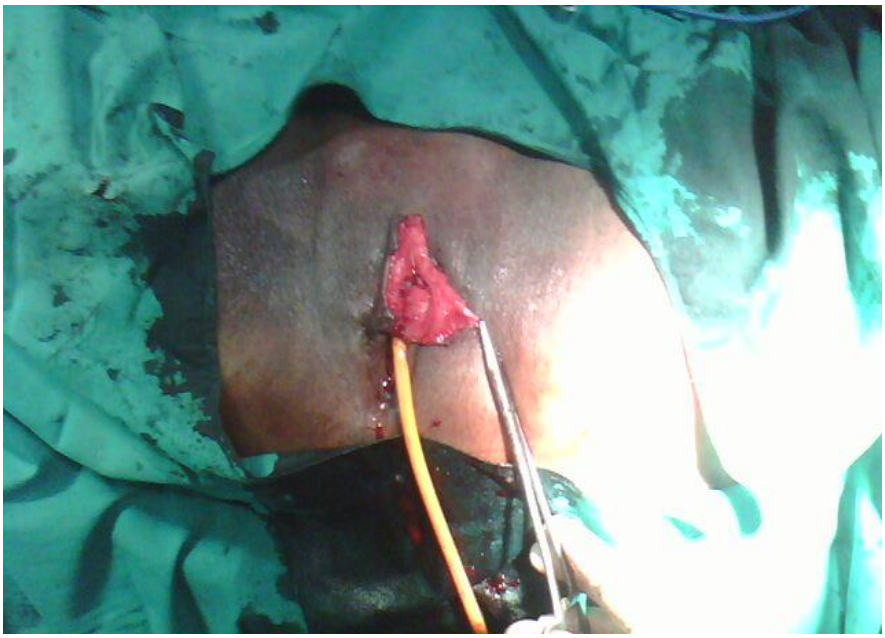
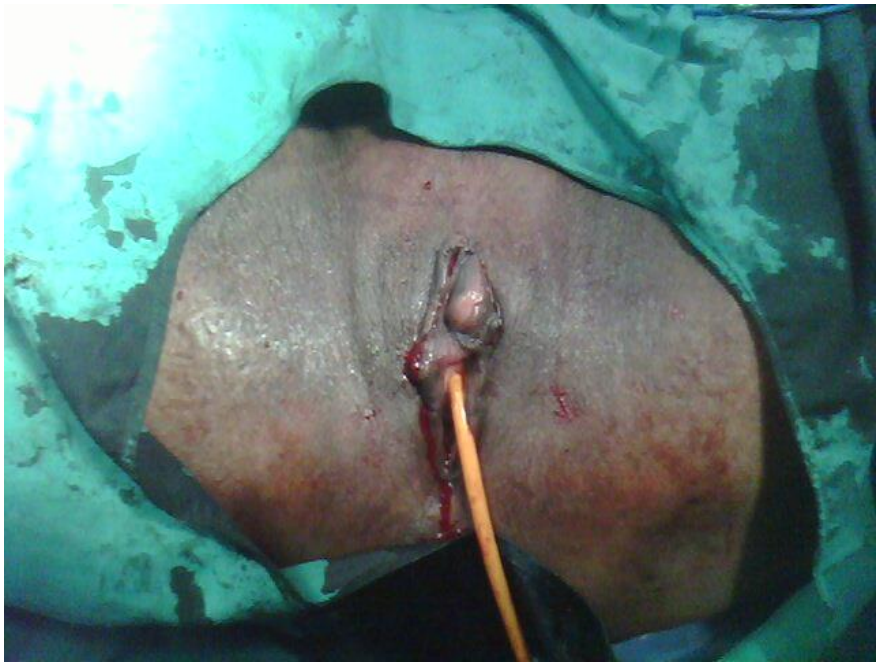


Figure 3: Clitoroplasty



DISCUSSION

Clitodauxe (or) Clitoromegaly refers to the Enlargement of Clitoris, which is a rare Surgical entity. Frequent definition of clitoromegaly is when the clitoral size is greater than 35 mm^2 (0.05 $inches^2$), which is almost twice the size given above for an *average* sized clitoral hood. Clitomegaly can be congenital or acquired. The most common congenital cause is female pseudohermaphroditism secondary to congenital adrenal hyperplasia (CAH) or adrenogenital

syndrome, caused by an enzyme defect in the normal pathway of steroid biosynthesis[1]. Virilization of the external genitalia may cause profound clitoromegaly but rarely causes formation of a true penile urethra.

However, clitoromegaly may be accompanied by fusion of the labioscrotal folds and perineoscrotal hypospadias, and a persistence of the urogenital sinus closing the external opening of the vagina. Bilateral hilus cell tumors of the ovary, steroid producing gonadal tumors, adrenal androgen-secreting carcinoma, Leydig cell tumor of the ovaries and metastatic carcinosarcoma of the urinary bladder [2] have been reported to cause clitoromegaly Fetal exposure to danazol [3] has been described as cause for clitoromegaly. An interesting case was reported by Akcam and Topaloglu [4] of clitoromegaly possibly following blood transfusion from an adult in a premature infant.

Among the non-hormonal conditions are neurofibromatosis [5] , epidermoid cysts, various syndromes and nevus lipomatous cutaneous superficialis. The majority of clitoromegaly cases related to Neurofibromatosis are congenital.Clitoral cysts arise from epidermis displaced into the dermis or the subcutaneous tissue either during the prenatal period or after a trauma.Various syndromes resulting from non-hormonal conditions may cause clitoromegaly,such as – Turner Syndrome, Cushing Syndrome, Fraser`s Syndrome. The primary abnormality is a defective androgen receptor protein due to mutation of the androgen receptor gene.Nevus lipomatous cutaneous superficialis (NLCS) is a relatively rare condition characterized by groups of ectopic fat cells dispersed in various parts of the body that may cause clitoromegaly when located on the clitoris. Pseudo hypertrophy of the clitoris has been reported in small girls due to masturbation: manipulations of the skin of prepuce leads to repeated mechanical trauma, which expands the prepuce and labia minora, thus imitating true clitoral enlargement.

The objectives of clitoroplasty are preservation of sexual arousal function and sensation, and cosmetic .Several clitoroplasty methods have been reported, but few describe preservation of dorsal and ventral neurovascular bundles in sexually mature women. Clitoroplasty with preservation of the neurovascular pedicle may be the optimal operative technique for the treatment of clitoromegaly.

REFERENCES

1. Bellinger MF: Feminizing genitoplasty and vaginoplasty. In: Reconstructive and plastic surgery of the external genitalia 1st edition, Edited by : Erlish RM , Alter Gj , Philadelphia,WB Saunders ; 1999,1:263
2. Langenstroer : Clitoromegaly caused by metastatic carcinosarcoma of ovary, Achieves of pathology and laboratory medicine, April 01,2003,127:505
3. Brunskill PJ : The effects of fetal exposure to Danazol.BrJ Obstet Gynaecol 1992,99:212-215
4. Akcam M Ttopaloglu a : Extremely immature infant who developed clitoromegaly during the second month of post natal life probably due to frequent whole blood transfusion from a adult male. Pediatr Int 2003,45:347-348.
5. Nicholas G Cost: Neurofibromatosis presenting as painless clitoromegaly, Urology journal 02/2009; 6(3):220-2.

*Corresponding author: Ajay chandrasekar.V.S.
E-mail: dracsin@rediffmail.com