Case Report

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# Acquired Clitoromegaly: A Gynaecological Problem or an Obstetric Complication?

Obstetrics and Gynaecology Section

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## ABSTRACT

Acquired non-hormonal clitoromegaly is a rare condition and is due to benign or malignant tumours and sometimes idiopathic. Few cases of clitoral abscesses have been reported after female circumcision. We hereby report a case of clitoral abscess causing acquired clitoromegaly following an obstetrical surgery.

**Keywords:** Clitoral abscess, Obstetrical surgery

## CASE REPORT

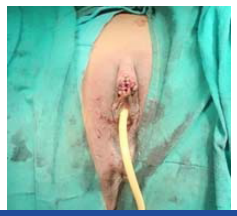
A 24-year-old woman was referred from a secondary care hospital as a case of urethral stenosis. Her presenting complaints were pain in perineal region and pain during micturition since last 4 months. There was no history of fever, burning or frequency of passing urine There was no history of any discharge or bleeding per vaginum. She was gravida 1, para 1. Last child birth was 4 months back delivered by cesarean section. She was breast feeding her child and had lactational amenorrhoea. There was no history of any medical treatment received for her present complaints or any surgical intervention in the perineal region. Her antepartum and intrapartum periods were uneventful except in the immediate postpartum period when she had pain in perineal region which further aggravated during micturition.

On general examination she was an average built healthy looking female. There was no hirsutism, breasts were fully developed, milk secretion was present. Axillary and pubic hairs were normal. Systemic and per abdomen examination did not reveal any abnormality. There was no inguinal lymphadenopathy.

On local examination, clitoromegaly was seen, about 3.5 cm X 1cm (clitoral index =350 $mm^2$), with normal overlying skin and phallus [Table/Fig-1] which was slightly tender. Per speculum and per vaginum examination did not show any abnormality. Urine routine examination was normal. Urine culture was sterile after 24 hours. Her total testosterone level was 24.67ng/dL, DHEA-S was 102.3 mcg/dL (reference range for females of 18-29 years : 44-332mcg/dL) [1].

USG abdomen was normal and no tumour was seen in adrenals. Uterus was normal size with normal bilateral adenexa. Transperineal ultrasound revealed an oblong, cystic lesion of size 3.3 cm X 1cm in clitoris with internal echoes suggestive of haematoma.

With provisional diagnosis of haematoma, she was put on analgesics and anti-inflammatory drugs along with a course of ciprofloxacin 500 mg BID with tinidazole 500 mg BID. She was reviewed after a week.


**[Table/Fig-1]:** Clitoromegaly. **[Table/Fig-2]:** Drainage of pus folllowed by marsupilisation. **[Table/Fig-3]:** On postoperative on day 10.

The size of swelling remained same but her pain was relieved. It was cystic not attached to underlying tissues and nontender. She was reviewed again after 10 days expecting that the haematoma may have resolved. However, the swelling was found to be persistent hence, FNAC (Fine Needle Aspiration Cytology) was decided to rule out any malignancy.

During FNAC, to our surprise, about 5-6cc frank thick pus was obtained and the clitoromegaly immediately regressed. Pus was sent for culture and sensitivity which was reported as sterile. Incision and drainage was planned under anaesthesia after pre-anaesthesia investigations and check up. Under general anaesthesia, urethra was catheterized, incision and drainage of pus was done followed by marsupilization [Table/Fig-2]. Follow up on postoperative day 10 revealed that the entire swelling had disappeared with near normal anatomy of the clitoral region [Table/Fig-3].

## DISCUSSION

Clitoromegaly is defined as a measure of the clitoral index (width × length in mm) more than 35$mm^2$ [2]. It can be congenital or acquired. Congenital causes are-congenital adrenal hyperplasia due to enzyme deficiency, babies of mothers having ingestion of androgens or drugs having androgenic actions i.e. norethisterone/danazole etc. during pregnancy, luteomas, theca-lutein cysts, virilizing adrenal or ovarian tumour during pregnancy.

| Author | Age years | Year | Diagnosis |
|---|---|---|---|
| Dhande A [3] | 7 | 2015 | Neurofibroma |
| Santosh Kumar [4] | 42 | 2014 | Leiomyoma |
| A Padmaja [5] | 17 | 2014 | Idiopathic isolated clitoromegaly |
| Azurah AG [6] | 6 | 2013 | Benign schwannoma |
| Adriano Luis Gomes [7] (3 cases) | | 2013 | |
| | 10 | | Lympho-angiofibroma |
| | 2 | | Epidermoid cyst |
| | 1 | | Fibroma |
| Singh A [8] | 18 | 2012 | Vascular hamartoma |
| Gazic B [9] | | 2011 | Pilomatrix carcinoma |
| Esther Maor Sagie [10] | 8 | 2010 | Pilonidal sinus |
| Mandal S [11] | 6 | 2009 | Intradermal nevus |
| Youssef Al Tonbary [12] | 3 | 2008 | Rhabdomyosarcoma |

**[Table/Fig-4]:** Acquired clitoromegaly: Case reports [3-12].

Acquired causes are PCOS, hyperthecosis ovarii, arrhenoblastoma, drugs induced and adrenal tumours. Various benign and malignant tumours of clitoris [Table/Fig-4] can also present as clitoromegaly [3-12]. Metastasis from distant organs can also cause clitoromegaly. Sometimes pseudoclitoromegaly can be found in girls as a result of masturbation. It can also be idiopathic.

We reviewed the literature for clitoral abscess as a cause of acquired clitoromegaly on pubmed and medline using keywords clitoral abscess but we could not find any such cause or case report of clitoral abscess related to obstetric event. However, few cases of periclitoral abscess [13-15] have been reported presenting as labial swelling and extending till clitoral region or swelling near the clitoral region.

AA Rouzi reported epidermal inclusion cysts to be a common complication, in countries where female circumcision (Female Genital Mutilation/FGM) is common [16]. Among the 32 cases of clitoral cysts, only 1 was infected and the clitoral abscess was drained.

In our case the clitoral abscess appeared to have formed in an infected haematoma. The diagnosis of urethral stenosis while being referred at tertiary care hospital, history of onset of pain in perineal region aggravated by micturition in the immediate postpartum period, suggests that there must have been some difficulty in insertion of urethral catheter and probably some injury might have happened in the clitoral region. This injury had led to the formation of a haematoma which later became infected to form an abscess causing clitoromegaly. However, an idiopathic cause of the clitoral abscess cannot be ruled out.

## CONCLUSION

Symptoms of UTI following caesarean section may not be always due to urinary tract infection. A gynecological examination is necessary to rule out traumatic sequelae even if the delivery is by abdominal route. Clitoral swelling if detected in postpartum period can occur due to direct obstetric trauma including the simplest of surgical intervention like urethral catheterization as in this case.

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