

Case Report

Case Report: Peri-Clitoral Abscess Diagnosis with Management Options: and Literature Review

M. Elshaikh¹, Mohamed Abdelrahman *, Feras J. Alkharouf², Rawia Ahmed³,
Hassan Rajab⁴

1,2,3. The Rotunda Hospital.

4. Royal College of Physicians of Ireland, The Rotunda Hospital, Beaumont Hospital.

***Corresponding Author: Dr Mohamed Abdelrahman**, Royal College of Physicians of Ireland, The Rotunda Hospital, Beaumont Hospital.

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Abstract

We are presenting the case of clitoral abscess which is rare to present, with publications are rare to be reported. This is a report of a 30-year-old patient who presented with clitoral swelling and pain without fever. In the clinical setting, when even mild clitoral swelling is diagnosed, the possibility of an abscess should be considered, with medical management should be considered first, then incision and drainage if needed.



Introduction:

Peri-clitoral abscesses are unusual and rare gynecological diagnoses with only a few cases been reported; therefore, linking the condition with specific causes is difficult. A large number of cases are women who had gone through female genital mutilation for religious reasons (1). With these patients, peri-clitoral abscesses occur due to the development of inclusion cysts after surgery, that eventually gets infected (2,3). There are peri-clitoral abscesses that can appear spontaneously without any history of surgical intervention. In those spontaneously developed cases, it's difficult to associate them with specific causes because these cases are rare. Therefore, options available for management are based on individual experiences and not on enough available evidence.

A history of sexually transmitted diseases(STI) will make it highly likely to get another genital infection. It has been estimated that in patients with STI, some of them would likely develop a clitoral abscess, and there is a high chance of acquiring other STIs (4).

It has been reported that Gram-negative bacteria were more commonly isolated than Gram-positives that are detected in genital abscesses; however, controversy has been observed(5).

Peri-Clitoral abscesses are linked with the secretion of normal pre-sexual intercourse vaginal fluids same as Bartholin Abscesses (5). However, the modalities of treatment by surgical intervention for both conditions remain unclear.

Case presentation:

30 year old nulliparous female referred from her general practitioner (GP) to The Rotunda Hospital, with a history of swelling in the clitoral area with soreness to touch for one week. She used Canesten cream during that period with no improvement. Her GP diagnosed her with genital abscess and referred her to the hospital with an oral prescription of flucloxacillin 500mg oral tablets four times a day. She attended The Rotunda Hospital after 24 hours for assessment as she felt no improvement with oral antibiotics.

Clitoral swelling was assessed in the emergency department, she had no surgical or medical history of note; nor any history of related STIs. On examination, she had a 5 cm clitoral hood swelling that was tender to touch (**figure 1**). She was offered intravenous antibiotics and observation or surgical drainage, but she preferred drainage. With a busy on-call day, she was started on IV flucloxacillin 1g four times a day and kept fasting.



Figure 1

By the time patient reached the theatre due to the busy time when the patient arrived in the hospital, she received 3 doses of IV flucloxacillin. On examination at theatre upper labia, minor swelling also noticed, but during cleaning and draping the abscess spontaneously ruptured and drained, abscess swab was taken in theatre. The pack was placed and removed after 6 hours prior to patient discharge from the hospital.

The patient was discharged 12 hours after the procedure on oral flucloxacillin 500 mg orally for 7 days, in addition to oral analgesia. The plan was to review the patient after 6 weeks in the gynecology clinic; but due to COVID 19 pandemic, she was seen 3 months later with complete resolution of symptoms, with no effect on sexual life.

The swabs which were taken showed light growth of *Streptococcus anginosus* and heavy growth of mixed anaerobes. she was discharged from the clinic with no further complaints.



Discussion:

Enlargement of the clitoris is defined as an increase of clitoral index (width × length in mm) more than 35mm² also known as Clitoromegaly (6). Congenital and acquired causes are both valid options. Firstly, congenital adrenal hyperplasia due to enzyme deficiency, babies of mothers had an increase of androgens or drugs having androgenic actions such as. norethisterone/ danazol.

AA Rouzi, included epidermal inclusion cysts as one of the most common complications, in countries where female circumcision (Female Genital Mutilation(FGM)) is common (7). Among the 32 cases of clitoral cysts, only 1 was reported to be infected and the clitoral abscess was drained.

Including the reports in which a periclitoral abscess was because of female clitoral mutilation (complicated circumcision of religious motives), in total 18 reports of spontaneous periclitoral abscesses have been published in the English medical literature, including the presented cases (8). Majority of the reported cases, the cause for the development of these spontaneous abscesses was unclear. A speculative pathogenetic mechanism could be a defect of the squamous stratified epithelium that allowed the flow of pathogens. Indeed, many microorganisms that cause purulent infections have been isolated in some of the published cases: coagulase-positive Staphylococcus, Streptococcus Bovis, Diphtheria species (9,10), and Bacteroids species. In another case, a periclitoral abscess. With a similar patient, an abscess was seen in cases of ectopic breast tissue, whereas at least one case of periclitoral abscess has been seen in a patient with Crohn's disease (11,12).

We tried to review the literature for clitoral abscess keeping the cause of spontaneous Clitoromegaly on PubMed using keywords clitoral abscess but we could not find any such cause or case report of clitoral abscess related to the non-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.

In our case, the clitoral abscess spontaneously formed in an infected cyst. The diagnosis of urethral and upper vulval pain while being referred at tertiary care hospital, history of onset of pain in perineal region aggravated by micturition in the immediate transfer reason indicated that there must have been some difficulty in the insertion of the urethral catheter and probably some injury might have happened in the clitoral region.

There is no agreement on the proper treatment of periclitoral abscesses. All reports of management were unfortunately subjective depending on personal or ex-experience.



Conclusion:

In conclusion, spontaneous periclitoral abscess is a very rare condition with no specific management options. Conservative management with or without antibiotics does not pose the risk of potential damage to the clitoris from the incision. Thus, it could possibly be trialed for those whom the anatomic surroundings of the clitoris in relation to the prepuce are not obviously demarcated. When they are not small (less than 1-2 cm) or when a quicker resolution of symptoms is required, a surgical approach can be reasonably followed, during the first episode. However, it is important that the operator identifies any cord similar structure pointing toward the mons pubis, indicating a pilonidal abscess, this will require excision of the tract. Thus, more studies are required to define the different management options and clinical features of this rare condition.

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