

A CASE OF RECURRENT BARTHOLIN GLAND ABSCESS IN PREGNANCY

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Abstract

Bartholin's gland cysts and abscesses are the most common cystic swelling of the vulva in women of reproductive age. These are usually small in size but the discomfort associated with it necessitates early consultations. Huge Bartholin's abscesses are uncommon. Fewer cases have been reported among non-pregnant women. This case involved a 29-year old second gravida, who presented at a gestational age of 34 weeks with a vulval swelling measuring 8 x 8 cm, following failure of its resolution from self-medicated antibiotics. She had experienced similar but smaller vulvar enlargement in her previous pregnancy that had resolved following similar medical treatment. She was treated successfully with marsupialization, without any adverse effect on the pregnancy. This case shows the likelihood of huge Bartholin's abscess complicating pregnancy and that there should be no hesitation to apply marsupialization in its treatment. The recurrence of the abscess in successive pregnancy in this woman, who kept using self-prescribed antibiotics, is a worrying trend and it requires educating women at various reproductive health care clinics about vulvar swellings and warns against antibiotics abuse.

Keywords: Bartholin's abscess; marsupialization; pregnancy.

Introduction

Bartholin's glands are a pair of pea-sized glands located bilaterally at the posterior region of the vaginal wall, lateral to the bulbocavernosus muscle. The openings of the ducts are at the 5 and 7 o'clock position on each side of the hymenal ring and each Bartholin's duct is lined with transitional epithelium measuring about 5 millimeter in diameter and 1.5 to 2 centimeter in length. These glands produce and secrete mucus which is of alkaline pH and serves as lubricants during sexual intercourse while it keeps the vulva moist¹. They were first described by the Danish Anatomist, Casper Bartholin in the 17th century².

The gland is prone to lesions, which are more frequently benign than malignant. Bartholin's gland cysts are the most common cystic enlargements of the vulva. The abscess is, however, three times more common than the cyst among women of reproductive age, especially the 20 to 29 years old non-pregnant and pregnant women^{3,4}. It is estimated to occur in approximately 2% of women in the developed countries.

Bartholin's abscess was initially thought to be a sexually transmitted disease because of the microbiological organisms that were isolated from it. However, various studies have shown that it is of polymicrobial origin with *Escherichia coli* being the most commonly associated

pathogen.^{3,6} Bartholin's abscesses are mostly symptomatic, presenting with painful vulval swelling, difficulty in walking or sitting, dyspareunia and fever.^{3,4} The diagnosis of this condition is clinical, with the typical presentation of vulval swellings that range in size from a pea to an egg; huge vulval swellings are an unusual presentation. When Bartholin's abscess occurs in pregnancy, it poses the additional anxiety of both its direct effect and that of its treatment on the safety of the pregnancy.^{7,8}

There are various treatment modalities for Bartholin's abscess. These include incision and drainage, aspiration, marsupialization, window operation, word catheterization, excision and silver nitrate application.^{3,5} However, a systematic review failed to identify the best of these methods of treatment.⁹

The patient was a 29 year-old G2 P1+0, with one living child, who presented at 34 weeks gestation with recurrent right vulval swelling. It was first noticed in the non-pregnant state and was treated with self-administered antibiotics. She experienced similar swelling in her previous pregnancy and treated it similarly with antibiotics and analgesics, consequent on which there was spontaneous rupture of the abscesses with resolution of symptoms. However, in this pregnancy, she noticed a worsening of symptoms and increase in size of the swelling

despite her use of two courses of antibiotics. She had no history of fever but had some difficulty in walking. There was no history of foul-smelling vaginal discharge or urinary symptoms.

This pregnancy was spontaneously conceived and had been otherwise uneventful. Her previous pregnancy was also uneventful and she had full term vaginal delivery in hospital. She had no significant medical history. Her general physical examination was normal. The symphysiofundal height was compatible with her gestational age. There was a right vulva swelling involving the right labia majora, measuring 8 cm × 8 cm soft, mildly tender and fluctuant [Figure 1]. Her packed cell volume, serum electrolytes, blood glucose profile and venereal disease research laboratory results were all normal. Human immunodeficiency virus (HIV) screening was nonreactive and obstetric ultrasound revealed normal findings.

She had marsupialization at which about 200 mL of thick chocolate-coloured fluid was drained. The cyst wall was sent for histology while the content was sent for microscopy, culture and sensitivity. Postoperatively, she was placed on oral ampicillin and metronidazole. She was commenced on twice daily sitz bath the following day. She had an unremarkable postoperative recovery.

The histology report revealed acute-on-chronic inflammation of the Bartholin gland tissue. Fluid microscopy showed pus cells and did not culture any organism. By the second postoperative week, the vulva had healed nicely and her pregnancy had progressed to term. The antenatal period remained uneventful and she had a normal delivery of a male baby at term.



Figure 1:

Discussion

This patient was a 29 year-old G2P1+0 female who was 34 weeks pregnant, the age group in which Bartholin's abscess most commonly presents.⁴ Although she presented with difficulty in walking which is a typical symptoms of the lesion,^{3,4} her symptom was mild compared to the size of the abscess (8 × 8 cm). Her unusual attitude to the lesion was further evident in her being more disturbed about the size of the swelling and its potential effect on her delivery than these symptoms. The mildness of her symptoms and non-exhibition of fever or pyrexia, despite such a large abscess, could be attributed to her self-medication with antibiotics and analgesics prior to presentation. Diagnosis of Bartholin's cyst/abscess in this patient was obvious because it matched the classical anatomical and clinical features of the condition.

Bartholin's abscess does occur in pregnancy and could be recurrent, especially in poorly treated cases. However, the few cases of huge Bartholin's abscess and cyst that have been reported in the literature were among non-pregnant women.^{8,9} This case indicates that pregnant women are also at risk of the huge types. Of special interest was the absence of demonstrable predisposing factors such as immune suppression or coinfection with sexually transmitted infections.

Although surgical excision of the diseased Bartholin's gland is the treatment for recurrent cyst or abscess, this patient was offered marsupialization because she had never had any surgical treatment in the past to justify other options. Some complications following the surgical treatment of Bartholin's abscess in pregnant women have been reported, including chorioamnionitis, sternoclavicular septic arthritis and septicaemia but none of these developed in this patient.^{10,11} Septicaemia is well-known complication of abscesses, which has the potential of inflicting maternal and fetal morbidity.¹¹

Escherichia coli has been implicated as one of the most common pathogens in Bartholin's abscess.^{3,6} In our case, microscopy confirmed the presence of pus cells, however, no organism was isolated. Histology showed evidence of acute-on-chronic inflammation. The chronicity of the lesion was attributable to the long interval since the first episode and the repeated self-medication with antibiotics.

The way this patient used antibiotics is a clear illustration of abuse of these medication. Its use without clinical consultations implied she could have exposed herself and her babies to risks of use of antibiotics that are not recommended in pregnancy and use of inadequate doses that predispose to the development of resistance against the antibiotics. Persistence of this trend implies that a time might come when access to sensitive antibiotics may be a

challenge, especially in developing countries where abuse of this type is rampant.

The implications of the patient's case go beyond obstetric and gynaecological practice. Not only will it be necessary to educate women on vulvar and other body swellings during pregnancy, especially at antenatal and other clinics, they must be warned of the dangers of antibiotics and other drug abuse. The health care system and government must also sanitize the up and downstream arms of the pharmaceutical industry in order to stem drug abuse in general.

Conclusion:

In conclusion, this unusual case of huge Bartholin's abscess in pregnancy is illustrative of the non-restriction of its occurrence to the non-pregnant alone. It has also shown that its surgical treatment by marsupialization does not complicate pregnancy. The recurrence of the case, coupled with the abuse of antibiotics by the patient, highlights the need to enlighten women on these issues at the various reproductive health care clinics.

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