

# Recurrent Bartholin's gland abscess in pregnancy: An uncommon presentation

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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 and are usually small in size, as the discomfort associated with it necessitates early consultations. Huge Bartholin's abscesses are uncommon and even fewer cases have been reported were among non-pregnant women. This case involved a 25-year old grandmultipara, who presented at a gestational age of 24 weeks with a huge vulval swelling measuring 14cm x 10cm, following failure of its resolution from self-medicated antibiotics. She had experienced similar but smaller vulvar enlargements in her two preceding pregnancies that had resolved following similar medical treatment. She was treated successfully with marsupialization, without any adverse effect on the pregnancy. This case illustrates 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 three successive pregnancies in this woman, who kept using self-prescribed antibiotics is a worrying trend that will require the education of women at various reproductive health care clinics about vulvar swellings and warn against antibiotics abuse.

**Key words:** Bartholin's abscess; marsupialization; pregnancy.

## Introduction

Bartholin's glands are pea-sized glands located at the base of the labia minora that secrete mucous for vulval and vaginal lubrication during sexual intercourse.<sup>[1]</sup> 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.<sup>[1,2]</sup> It is estimated to occur in approximately 2% of women in the developed countries, whereas an incidence of 1.4% has been reported from Port Harcourt, Nigeria.<sup>[2,3]</sup>

Bartholin's abscess was initially thought to be a sexually transmitted disease because of the microbiological organisms that were isolated from it at that time. However, various studies have recently shown that it is of polymicrobial origin with *Escherichia coli* as one of the most commonly associated pathogens.<sup>[1,4]</sup> Bartholin's abscesses are mostly symptomatic, presenting with painful vulval swelling, difficulty in walking or sitting, dyspareunia and fever.<sup>[1,2]</sup> 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.

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When Bartholin's abscess occurs in pregnancy, it stirs the additional anxiety of both its direct effect and that of its treatment on the safety of the pregnancy in both the patient and the physician. Although some cases of huge Bartholin's cysts and abscesses have been reported on non-pregnant women, much less have been heard of huge Bartholin's abscess in pregnancy, which is the subject of this report.<sup>[5,6]</sup>

There are various treatment modalities for Bartholin's abscess and these include simple incision and drainage, aspiration, marsupialization, window operation, word catheterization, carbon dioxide laser, excision and silver nitrate application.<sup>[1-3]</sup> However, a systematic review failed to identify the best of these methods of treatment.<sup>[7]</sup>

## Case Report

The patient was a 25-year-old housewife who was G9 P<sub>5</sub><sup>+3</sup>, with five living children, who presented at the Gynaecology Clinic at 24 weeks gestation with recurrent left vulval swelling that was first noticed approximately 8 years prior to presentation. It was first noticed in the non-pregnant state and was treated with self-administered antibiotics. She experienced recurrences in her subsequent two pregnancies 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 size of the swelling despite her use of two courses of antibiotics and decided to seek care in the hospital. She had no history of fever but had some difficulty in walking and admitted superficial dyspareunia. There was no history of foul-smelling vaginal discharge or urinary symptoms, and there was no swelling in any other part of the body.

The index pregnancy was spontaneously conceived and had been otherwise uneventful, but was yet to be booked for antenatal care. During her first, third, fifth, sixth and seventh pregnancies, she had antenatal care in a primary health center but delivered all at home at 9 months of gestation, without experiencing any complications at delivery. She incurred spontaneous first trimester abortions in her second, fourth and eight pregnancies; each of which proceeded to completion without complications. She had no significant medical history. Her general physical examination was unremarkable. The symphysiofundal height was compatible with her gestational age. There was a huge left vulva swelling involving the left labia majora, measuring 14 cm × 10 cm soft, mildly tender, fluctuant with areas of keratinization and central hyperaemic area measuring 2 cm × 2 cm [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 under saddle block regional anaesthesia, at which about 300 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 ampiclox, metronidazole and tramadol; 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 whereas the fluid microscopy showed pus cells and did not culture any organism. By the third postoperative week, the vulva had healed nicely [Figure 2] and her pregnancy had progressed to 27 weeks of gestation. The antenatal period remained uneventful and she had a normal delivery of a female baby at term.

## Discussion

This patient was a 25 year-old grandmultiparous female who was 24 weeks pregnant, the age group in which Bartholin's abscess most commonly presents.<sup>[2]</sup> Although she presented with difficulty in walking and superficial dyspareunia, which are typical symptoms of the lesion,<sup>[1,2]</sup> her symptoms were mild compared to the size of the abscess (14 × 10 cm). Equally amazing was her tolerance of coitus in pregnancy with the large mass. 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



Figure 1: Pre-operative



**Figure 2:** Three weeks post-op

analgesics prior to presentation. Clinching the diagnosis of Bartholin's cyst/abscess in this patient was routine 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, as was in this patient who had been having recurrences due to improper treatment during previous episodes. However, the few cases of huge Bartholin's abscess and cyst that have been reported in the literature were among non-pregnant women.<sup>[6-7]</sup> 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 advocated as 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, none of which developed in this patient.<sup>[8,9]</sup> There is no documented evidence of the effects of Bartholin's abscess on pregnancy and vice-versa. However, septicaemia is a well-known complication of abscesses, which has the potential of inflicting maternal and foetal morbidity.<sup>[9]</sup>

*Escherichia coli* has been implicated as one of the most common pathogens in Bartholin's abscess.<sup>[1,4]</sup> In this case, microscopy confirmed the presence of pus cells, however, no organism was isolated and the histology reported 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 in her successive pregnancies was a clear illustration of abuse of this important medication. Her using it without clinical consultations implied she bought them without prescriptions and could have exposed herself, her babies and her community to risks such as use of antibiotics that are not recommended in pregnancy because of their side-effects and use of inadequate doses that predispose to the development of resistance against the antibiotics. Abuse of antibiotics has been a major global concern in recent times, especially because the rate of development of resistance to existing antibiotics outrun the rate at which new antibiotics are discovered. Persistence of this trend imply 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 goes 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, and 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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## Conflicts of interest

There are no conflicts of interest.

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