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Marsupilization of a Giant Bartholin's Abscess - A Case Report

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Author's contribution

The sole author designed, analysed, interpreted and prepared the manuscript.

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Case Report

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ABSTRACT

Bartholin's gland cysts are one of the common vulval masses in females of reproductive. They are usually small in size and asymptomatic but sometimes might become large or get infected leading to an abscess. Marsupilzation of the Bartholin's gland is generally indicated when there is a large abscess that makes surgical excision of the gland difficuilt. This is a case report of a lady who presented at a clinic with a large Bartholin's cyst abscess which was successfully treated by marsupilization.

Keywords: Bartholin's gland; Bartholin's gland cyst; Bartholin's cyst abscess; marsupilization.

1. INTRODUCTION

"Bartholin's glands also known as greater vestibular gland, the female counterpart of the Cowpers glands in the male, is a pair of compound racemose-shaped glands lined by columnar epithelium" [1]. Each gland measures about 0.5 cm, with a 2 cm duct lined by transitional epithelium [1], opening into the vestibule, in the groove between hymen and ipsilateral labia minora at around 4-5'O and 7-8'O clock position [2].

"Their function is to secrete normal presexual intercourse alkaline mucous vaginal fluid for lubrication during sexual stimulation. These

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normally non-palpable pea size glands become palpable only if the duct become cystic or gland abscess occur" [3].

"Bartholin duct cyst or gland abscess is the most common cystic growth in the vulva" [3]. "It impacts a majority of women of the reproductive age group and hence its important to diagnose and detect them early for better management and prevention of recurrence in large number of women in the community" [3]. "Bartholin's cyst results from ductal obstruction and secondary bacteria colonization may lead to an abscess of the gland either by way of an acute infection of the cyst or an ab initio infection of the gland results in its abscess" [3] .

2. CASE PRESENTATION

The Patient was a 32 year old mother of two with last childbirth six years back with both deliveries vaginally at hospital. She belongs to a small town near Prayagraj with upper middle class socioeconomic status and good personal hygiene. There is no history of any medical or surgical illness or morbidities in the the past. She presented to the out patient department with swelling in the left labia which was gradually progressive was gradually increasing in size over the last 6 months and pain for the last 15 days which was affecting her daily activities and sexual lifestyle due to poor body image. Mass was located on the left half of the labia majora measuring about 8 cm by 5cm, extending from just below the pubic bone to the fourchette, it was gave discomfort to the patient while sitting but there was no history of fever. It was soft but tense with smooth surface and tender to touch. Per speculum and bimanual examination were normal and there was no vaginal discharge. There were no regional lymph node enlargements. A diagnosis of huge Bartholin's cyst abscess was made and she was counselled for admission and marsupilzation as surgical management. She had no other morbidities or any history of previous surgery and an infection screen (HIV 1 & 2, hepatitis B, Hepatitis C and VDRL) done came out to be negative.

After proper consent and preanesthetic checkup the surgery was done under spinal anaesthesia with patient placed in lithotomy position. The pubic region including the thighs, vulva and vagina was painted and draped. She had pre-operative intravenous antibiotics with ceftriaxone 1gram stat. A vertical elliptical vertical incision was made at the mucocutaneous junction at the most prominent point the walls of abscess were opened wide to allow purulent exudate to drain. The membranes of the abscess was then sutured to vaginal mucosa and to the skin of introitus in order to affect granulation and reepithelialisation of the wound from bottom of abscess to the top. The pus was sent for culture and sensitivity. Postoperative period was uneventful and on the second day the patient was placed on regimen of sitz bath , oral analgesics and antibiotics for a week and stool softener for three days. She was seen at one and 3 weeks after surgery with no complaint and good wound healing. There has been no report of recurrence for 1 year now.

Images (1) Huge Bartholin's abscess in preoperative condition (2,3) postoperative period.

Image 1 Image 2 Image 3

Image 1, 2: Huge Bartholin's abscess in preoperative condition
Image 3: Huge Bartholin's abscess in postoperative condition

3. DISCUSSION

Bartholin’s cysts and abscess are the most common types of Bartholin’s gland masses [4]. Bartholin's gland cysts form as a result of duct dilatation followed by duct entrance blockage. Blockage of the ductal ostium causes secretion accumulation and cystic distension of the ducts, which can evolve to an expanded large sized-gland and, in rare cases, a massive or gigantic gland. Infections, iatrogenic occlusion by sutures from a previous vulvovaginal operation, congenital narrowing, and scarring from vulvovaginal surgeries are all possible causes [1,3].

“An obstructed Bartholin’s duct can become infected and form an abscess which are three times more common than cysts” [3,4]. “Women in the reproductive age group are likely to develop Bartholin’s abscess. Abscesses appear most likely in women at risk for sexually transmitted infections” [1]. A Bartholin's duct cyst or gland abscess affects 2% of women at some time in their lives.

“Bartholin’s duct cyst or gland abscess is the most common cystic growth in the vulva. White and black women are likely to develop Bartholin’s cyst or abscess than Hispanic women and women of high parity having a lower risk” [3]. “After menopause Bartholin’s glands duct disorders are uncommon and should raise suspicion of neoplasia if found” [5]. “Carcinoma of the Bartholin’s glands(usually an adenocarcinoma) is rare and incidence approximates 0.1 per 100, 000” [5].

“Bartholin’s cysts are small and asymptomatic except for mild to moderate discomfort during sexual arousal. Large or infected gland causes severe vulval pain that makes walking sitting or engaging in sexual activity uncomfortable” [5]. “ Tenderness over the mass with or without fever is a feature of an abscess which is absent in a Bartholin’s cyst” [1].

“On examination, while skin around a Bartholin’s cyst usually appears normal that of an abscess may be warm, tender, occasionally surrounded by erythema and oedema and in large cases may expand into the upper labia. The differential diagnosis of Bartholin’s duct cyst include Bartholin abscess, epidermal inclusion cyst, Skene’s duct cyst, hidradenoma cyst of the canal of Nuck [3] lipomas, epidermoid cysts, hidradenitis suppurativa” [6]. The anatomic placement of the mass generally gives it away.

“Clinical examination is usually enough to make a diagnosis, deep seated or giant Bartholins’s masses may require high definition ultrasound or MRI evaluation” [7,8,9]. Traditional surgical techniques employed include simple drainage, marsupialization, and use of a Word catheter or Jacobi ring and gland excision.

“Simple incision and drainage or needle aspiration may provide transient relief from symptoms. Simple drainage is no longer an effective treatment modality as recurrence is the rule unless a permanent drainage is established” [10].

“Marsupialization is safe, easy to perform, and lubricating function of the gland is preserved” [3,7]. “A randomized prospective study of 83 women who had marsupialisation revealed discharge at the surgical site, labial oedema, recurrence and scar formation as the most frequent postoperative complaints” [11].

“Indications for glandular excision include; no response to conservative attempts at establishing a drainage tract or in ruling out adenocarcinoma in menopausal women with an irregular nodular Bartholin’s glands or a huge Bartholin’s cyst” [5]. Newer therapeutic techniques for Bartholin's gland cyst and abscess include carbon dioxide laser, silver nitrate, and needle aspiration with 70% alcohol sclerotherapy.

There is no literature on the management of large or giant-sized cysts with CO_2 laser ablation. “Marsupialization and silver nitrate application were both effective in treating Bartholin's gland cyst and abscess, with silver nitrate favoring complete healing with reduced scar formation” [10]. “Complications of the management of Bartholin cyst and abscess include dyspareunia, recurrence, infection, scarring haematoma formation and slow healing” [4,5]. None of these complications occurred in the case presented [12-17].

4. CONCLUSION

Bartholin’s cyst usually presents as a vulval mass but rarely does it grow so large. Symptoms may vary in level of discomfort experienced which is usually a direct function of the size.

Diagnosis is usually clinical because of the location. Ultrasound and MRI may be useful in the treatment of such a rare and massive Bartholin's mass. Treatment for a large Bartholin's cyst may differ from most traditional

ways to treating a small Bartholin's cyst. Surgical care with full cyst removal under antibiotic coverage is the most appropriate and definitive treatment with tissue histology.

CONSENT

After proper consent and preanesthetic checkup the surgery was done under spinal anaesthesia with patient placed in lithotomy position.

ETHICAL APPROVAL

As per international standard or university standard written ethical approval has been collected and preserved by the author(s).

COMPETING INTERESTS

Author has declared that no competing interests exist.

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