

Case report

Marsupilization of a Giant Bartholin's abscess - a case report

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. Marsupilization of the Bartholin's gland is generally indicated when there is a large abscess that makes surgical excision of the gland difficult. 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.

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. Each gland measures about 0.5 cm, with a 2 cm duct lined by transitional epithelium¹, opening into the vestibule, in the groove between hymen and ipsilateral labia minora at around 4-5'O and 7-8'O clock position.

Their function is to secrete normal presexual intercourse alkaline mucous vaginal fluid for lubrication during sexual stimulation. These normally non-palpable pea size glands become palpable only if the duct become cystic or gland abscess occur².

Bartholin duct cyst or gland abscess is the most common cystic growth in the vulva². 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 abscess².

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 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 marsupilization 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

DISCUSSION

Bartholin's cysts and abscess are the most common types of Bartholin's gland masses³ . Bartholin's gland cysts occur following dilatation of the duct preceded by blockage of the duct opening. Blockage of the ductal ostium of the ducts leads to accumulation of secretions and cystic distension of the ducts which can progress to an increased large sized-gland and rarely may become huge or gigantic. Other possible causes include; infections, iatrogenic occlusion from sutures from a prior vulvovaginal surgery, congenital narrowing and scarring from vulvovaginal surgeries^{1,2} .

An obstructed Bartholin's duct can become infected and form an abscess which are three times more common than cysts,^{2,3} . Women in the reproductive age group are likely to develop Bartholin's abscess. Abscesses appear most likely in women at risk for sexually transmitted infections¹ . Two percent of women develop a Bartholin's duct cyst or gland abscess at some time in life.

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 risk². After menopause Bartholin's glands duct disorders are uncommon and should raise suspicion of neoplasia if found.⁴ Carcinoma of the Bartholin's glands (usually an adenocarcinoma) is rare and incidence approximates 0.1 per 100,000.⁴

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 uncomfortable⁴. 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 Nuck² lipomas, epidermoid cysts, hidradenitis suppurativa,⁵. The anatomic location of the mass usually gives it away.

Clinical examination is usually enough to make a diagnosis, deep seated or giant Bartholin's masses may require high definition ultrasound or MRI evaluation.^{6,7,8} 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 established⁹.

Marsupialization is safe, easy to perform, and lubricating function of the gland is preserved.^{2,6} 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.¹⁰

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.⁴ Newer treatment modalities for Bartholin's gland cyst and abscess include the use of carbon dioxide laser, silver nitrate and needle aspiration with 70% alcohol sclerotherapy.

Experience with management of huge or giant-sized cysts with CO₂ laser ablation is not available in literature. Marsupialization and silver nitrate application to the treatment of Bartholin's glands cyst and abscess showed equal efficacy with silver nitrate favouring complete healing with less scar formation.¹⁰

Complications of the management of Bartholin cyst and abscess include dyspareunia, recurrence, infection, scarring haematoma formation and slow healing.^{3,4} None of these complications occurred in the case presented.

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 as its location gives it away. Ultrasound and MRI may be an adjunct for such rare gigantic Bartholin's mass. Treatment modality for a huge Bartholin's cyst may vary from the most of the tradition approaches to the everyday Bartholin's cyst. Surgical management with complete cyst excision under antibiotic coverage is the most suited and definitive treatment with a histological assessment of tissue.

REFERENCES

1. Danso KA. Bartholin's gland Cyst and Abscess. In: Kwawukume EY , Emuveyan EE, editors. *Comprehensive Gynaecology in the tropics*. 2005; 112-113.
2. Omole F, Simmons BJ. Management of Bartholin's duct cyst and gland abscess. *Am Fam Physician*. 2003; 68(1):135-140.
3. Boardman LA, Kennedy CM. Benign Vulvo- vaginal disorders. In: Ronald SG, Beth YK,
4. Arthur FH, Ingrid NE (eds). *Danforth's Obstetrics and Gynecology* 2008; (10):625-639.
5. Schorge OJ, Schaffer IJ, Halvoson ML, Bradshaw DK, Hoffman LB , Cunningham GF. Benign disorders of lower genital tract. *William's gynaecology*. 2008; (1):96-98.
6. Koenig C, Tavassoli FA. Nodular hyperplasia, adenoma, and adenomyoma of Bartholin's gland. *Int J Gynecol Pathol*. 1998; 17:289-94.
7. Kozawa E, Irisawa M, Heshiki A, Kimura F, Shimizu Y. MRI findings of a giant Bartholin's duct cyst. *Magn Reson Med Sci*. 2008; 7:101- 03.
8. Berger MB, Betschart C, Khandwala N, De- Lancey JO, Haefner HK. Incidental Bartholin gland cysts identified on pelvic magnetic resonance imaging. *Obstet Gynecol*. 2012; 120:798-802.
9. Eppel W, Frigo P, Worda C, Bettelheim D. Ultrasound imaging of Bartholin's cysts. *Gynecol Obstet Invest*. 2000; 49:179-82.
10. Fariborz M. Benign disorders of the vulva and vagina In: DeCherney AH, Nathan L, Goodwin TM, Laufer N (eds). *Current Diagnosis & Treatment Obstetrics & Gynecology*. 2007 ;(10): 618-619.