

Case Report: A Rare Case of Bartholin's Cyst Ward Catheter Found In The Urinary Bladder

Aysha Nedham, MD, BSC, FRCSC* Angela Deane, MD, FRCSC** Stanley Flax, MB Bch, FRCSC*** Modupe Tunde-Byass, MD, FRCSC****

ABSTRACT

A variety of skin lesions from benign to premalignant and malignant can present on the vulva. One of the most common presentation to the emergency department is Bartholin gland issues, from simple cyst to Bartholin gland abscess and malignancy.

Symptomatic Bartholin abscesses and cysts account for about 2% of all gynecologic visits per year [1]. Varieties of management options are available for symptomatic Bartholin cysts or abscesses, depends on the patient's symptoms and degree of inflammation and infection present. Treatment options include simple drainage, fistulization, marsupialization, and excision of the gland. These treatment options do not guarantee complete cure of the Bartholin gland abscess and they might be associated with rare complications. [2].

INTRODUCTION

Bartholin cyst and abscess is a very common chief complaint for presentation to the emergency department and is a very common gynecology complaint [3]. Approximately 2% of women have a Bartholin cyst related issue during their life span [4]. Bartholin's glands, which become active at puberty, are a pair of pea-sized mucus-secreting vestibular glands, with a 2-cm duct opening into the vestibule in the groove between the hymen and the labia minora at the 5-o'clock and 7-o'clock positions [4,5]. The main function of this gland is to secrete mucus that is important for lubrication during sexual stimulation [5]. If the distal duct was blocked secondary to trauma or infection and that results in accumulation of the secretions and hence development of Bartholin cyst and abscess. That is painful and requires medical or surgical intervention.

The purpose of this paper is to report unusual, rare and interesting case of a patient with a ward catheter that was found in the urinary bladder two weeks after placement into a left-sided Bartholin cyst, that did not help with the pain since placement. Ultrasound revealed the presence of a foreign body in the bladder. So, she underwent a cystoscopy and removal of the ward catheter in the OR.

CASE PRESENTATION

A 31-year-old woman was seen in the emergency department with recurrent Bartholin cyst requiring two episodes of incision and drainage in the past year. She denied any urinary symptoms or signs of systemic infections. She had no relevant medical history. Given the fact the context of the patient having previously failed incision and drainage, so the plan was to have a ward catheter inserted into the Bartholin cyst by the emergency department team. This is a bedside procedure performed with local anaesthesia and then a ward catheter is inserted and inflated with 3 cc of normal saline. She was sent home and the plan

is to follow her in the gynecology clinic in 4 weeks for removal of the catheter. She tolerated the catheter well for a week until she started complaining of acute pain which was worse sitting down. She was not able to see the catheter.

So was seen in the gynecology acute clinic, where an examination was done. The Bartholin cyst reaccumulated and the catheter was not seen or found in the original placement site. At this point she was complaining of mild urinary symptoms, manifested as suprapubic pain and dysuria but no hematuria that started a week after placement of the ward catheter. A urinalysis was sent and there were leukocytes, no hematuria and culture was sent. She had a pelvic ultrasound that described the malpositioned ward catheter within the bladder lumen. On exam, there was a circumscribed cyst in the left vaginal wall measuring approximately 3 cm in keeping with a Bartholin cyst. She was consented for examination under anesthesia, marsupialization of left Bartholin's cyst and cystoscopy. The catheter was removed from the bladder during the cystoscopy under direct visualization (Figure 1-12), using a 24 French cystoscope noting the ward catheter in the bladder and it was still inflated. There was no obvious fistula or perforation of the bladder. A spinal needle was placed suprapubically to deflate the balloon, however this failed. A prostate biopsy disposable Boston Scientific needle was advanced suprapubically under direct visualization and the balloon was successfully deflated. The catheter was gently removed through the urethra. The bladder itself was unremarkable. The attention was then directed to marsupialization of the Bartholin cyst in the usual fashion and then the cyst was packed with a betadine-soaked pack. Patient had an uneventful post-operative recovery when seen at 4 weeks follow-up.

Additionally, a surgical marsupialization of the cyst was done under general anaesthesia. She was seen 6 weeks post-operatively, the surgical scar healed well. She reported no discomfort or dyspareunia.

* Department of Obstetrics and Gynaecology
University of Toronto, Toronto, ON.
E-mail: dr.ayshakhonji@gmail.com

** Department of Obstetrics and Gynaecology
North York General Hospital, ON.

*** Department of Urology, North York General Hospital, ON.

**** Department of Obstetrics and Gynaecology, University of Toronto, Toronto, ON.



(Figure 1,2) - ward Catheter seen inflated within the urinary Bladder * Right Ureter



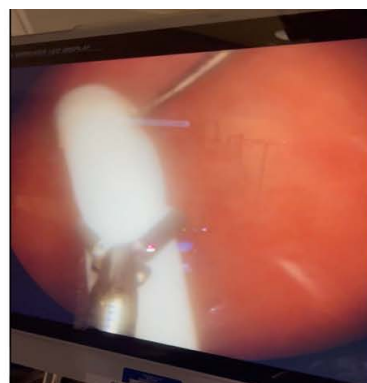
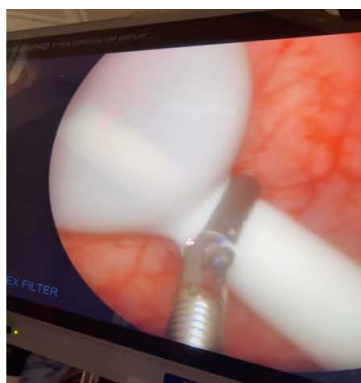
(Figure 3) – Needle inserted suprapubically into the bladder



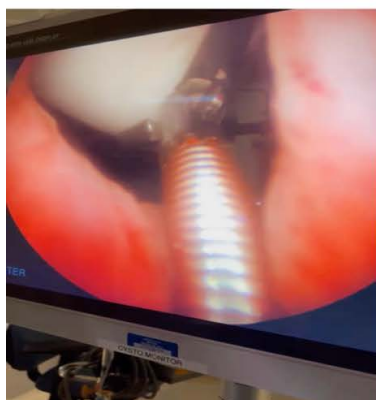
(Figure 4,5) – Spinal Needle attacking the mobile inflated ward Catheter within the urinary Bladder Ureter



(Figure 6) – Ward Catheter failed to be pierced using the spinal Needle



(Figure 7,8,9) – Ward Catheter immobilized and pierced using a prostate Biopsy Needle



(Figure 10) – Deflated ward catheter removed through the urethral sphincter



(Figure 11) – ward Catheter grasped and extracted using the cystoscope



(Figure 12 – ward Catheter next to a needle driver

DISCUSSION

Vulvar benign masses are common in adult women [3,4]. Typical lesions are glandular cysts [5]

The most common types of Bartholin's gland masses are cysts or abscesses, with abscesses being more common [6]. Patients can have diverse symptoms, ranging from mild discomfort to Urinary obstruction [7]. Management is determined by the symptoms, size, recurrence history and age of the patient and their preferences. Bartholin's abscess can be managed conservatively or surgically .

Surgical management can be done in an outpatient setting if appropriate equipment's and expertise are available and patient consents for that. Surgical management is by performing incision and drainage after application of local anaesthesia or by inserting bartholin ward catheter into the cyst cavity , that stays in for 4 weeks to keep the cyst open. By offering outpatient management, patients avoid general anaesthesia and has quicker recovery. [8-10]

However, if recurrence or patient is clinically unwell then management under anaesthesia should be considered. The preferred treatment is surgical drainage and marsupialisation, as it preserves function and prevents reformation of the cyst or abscess [11-14]

Recurrence is reported in approximately 20% of patients (ranging from 0% to 38%), and is more frequent after simple drainage [15].

The advantages of bartholins ward catheter is that the patient can resume normal activities again once comfortable, including exercise. The catheter may cause minor discomfort but should not be painful. Patient is advised to avoid intercourse , tampons and swimming with the catheter in place. In a systematic review in 2009, authors concluded that all of the available treatments were associated with lesser recurrence rates, faster healing, and few adverse events. However, best treatment approach for these bigger size cysts could not be identified according to the current literature [16].

CONCLUSION

For patients with urogynaecological symptoms, an adequate physical examination should be initially performed, and this examination will guide requests for additional tests. Although a differential diagnosis of a Bartholin's cyst can be made preoperatively, the confirmation is necessarily histological. Management of bartholin abscess is not complicated . However, any plan of management can be associated with complications.

Though Bartholin's cyst abscess presents as a vulval mass, a dumb-bell shaped presentation or as a giant cyst, as in our cases are very rare. Management modality of these may be altered from that of a normal presentation according to the amount of discomfort it causes to the patient and size and extent of the mass. Though physical examination and MRI help in making a diagnosis, biopsy is confirmatory. Surgical management with complete cyst excision under antibiotic coverage is the definitive treatment.

There were no major complications reported with ward catheter placement, however, in this case report we reported a bartholin ward catheter which was found in the urinary bladder, so it was either placed in the urinary bladder to start with (however, patient was able to feel it for the first few days) , or the other possibility is that the catheter migrated to the urinary bladder (which again there were no signs of bladder laceration or tears seen in the bladder mucosa during cystoscopy) . So, the take home message

is to be careful while performing this simple bartholins ward catheter placement.

Authorship Contribution: All authors share equal effort contribution towards (1) substantial contributions to conception and design, acquisition, analysis and interpretation of data; (2) drafting the article and revising it critically for important intellectual content; and (3) final approval of the manuscript version to be published. Yes.

Informed Consent : Written informed consent was obtained from the patient for the publication of the details related to the patient and a copy has been kept for review by the Editor-in-Chief of this journal when needed to do so.

Acknowledgements: Thanks to the team of the gynaecology and Urology department at North York General Hospital – Toronto - to obtain the details of the case reported in this paper.

Potential Conflicts of Interest: None

Competing Interest: None

Acceptance Date: 22-04-2023

REFERENCES

1. Pundir J, Auld BJ. A review of the management of diseases of the Bartholin's gland. *J Obstet Gynaecol* 2008;28(2):161-5.
2. Wechter ME, Wu JM, Marzano D, et al. Management of Bartholin duct cysts and abscesses: a systematic review. *Obstet Gynecol Surv* 2009;64(6): 395-404.
3. E.Karaman,N.Cim,Z.Akdemir,E.Elci,H.Akdeniz,Giantvulvare pidermoidcystinan adolescent girl, Case Rep. *Obstet. Gynecol.* (2015) <https://doi.org/10.1155/2015/942190> (942190).
4. R. Kessous, B. Aricha-Tamir, B. Sheizaf, N. Shtainer, J. Moran-Gilad, A.Y. Weintraub, Clinical and microbiological characteristics of bartholin gland abscesses, *Obstet. Gynecol.* 122 (4) (2013) 794–799, <https://doi.org/10.1097/AOG.0b013e3182a5f0de>.
5. A.R. Kallam, V. Kanumury, N.N. Bhimavarapu, B. Soorada, A report of two cases of “giant bartholin gland cysts” successfully treated by excision with review of literature, *J. Clin. Diagn. Res.* 11 (6) (2017) PD11–PD13, <https://doi.org/10.7860/JCDR/2017/26802.10088>.
6. K.S. Eilber, S. Raz, Benign cystic lesions of the vagina: a literature review, *J. Urol.* 170 (3) (2003) 717–722, <https://doi.org/10.1097/01.ju.0000062543.99821.a2>.
7. A.R. Kallam, V. Kanumury, N.N. Bhimavarapu, B. Soorada, A report of two cases of “giant bartholin gland cysts” successfully treated by excision with review of literature, *J. Clin. Diagn. Res.* 11 (6) (2017) PD11–PD13, <https://doi.org/10.7860/JCDR/2017/26802.10088>.
8. Marzano DA, Haefner HK. The Bartholin's gland cyst: Past, Present and Future. *J Low Genital Tract Disease.* 2004;8(3):195.
9. Haider Z, Condous G, Kirk E, Mukri F, Bourne T. The simple outpatient management of Bartholin's abscess using the Word catheter: a preliminary study. *Aust N Z J Obstet Gynecol.* 2007;47(2):137-40.
10. Word B. Office treatment of cysts and abscesses of Bartholin's gland duct. *S Med J.* 1968;61:514-8.
11. K.S. Eilber, S. Raz, Benign cystic lesions of the vagina: a literature review, *J. Urol.* 170 (3) (2003) 717–722, <https://doi.org/10.1097/01.ju.0000062543.99821.a2>.

12. H. Krissi, A. Shmueli, A. Aviram, A. From, R. Edward, Y. Peled, Acute Bartholin's abscess: microbial spectrum, patient characteristics, clinical manifestation, and surgical outcomes, *Eur. J. Clin. Microbiol. Infect. Dis.* 35 (3) (2016) 443–446, <https://doi.org/10.1007/s10096-015-2557-9>.
13. Wechter ME, Wu JM, Marzano D, Haefner H. Management of Bartholin duct cyst and abscess: a systematic review. *Obstet Gynecol Surv.* 2009;64(6):395-404.
14. Reif P, Ulrich D, Bjelic-Radisic V, Hausler M, Schnedl-Lamprecht E, Tamussimo K. Management of Bartholin's cyst and abscess using the Word catheter: implementation, recurrence rates and costs. *Eur J Obstet Gynecol Reprod Biol.* 2015;190:81-4.
15. M.E. Wechter, J.M. Wu, D. Marzano, H. Haefner, Management of Bartholin duct cysts and abscesses, *Obstet. Gynecol. Surv.* 64 (6) (2009) 395–404, <https://doi.org/10.1097/OGX.0b013e31819f9c76>.
16. Wechter ME, Wu JM, Marzano D, Haefner H. Management of Bartholin duct cysts and abscesses: a systematic review. *Obstet Gynecol Surv.* 2009;64:395-404.