Posterior vaginal wall Gartner’s duct cyst

Ripan Bala, Madhu Nagpal, Manmeet Kaur, Harmanpreet Kaur
Department of Obstetrics and Gynaecology, Sri Guru Ram Das Institute of Medical Sciences and Research, Amritsar, Punjab, India

ABSTRACT

Cyst of posterior vaginal wall is very rare. This case relates to a patient who presented with polypoidal mass protruding out from vagina which could have been easily mistaken as uterovaginal prolapse, but appropriate clinical evaluation supported with investigations clinched the diagnosis easily.

Key Words: Posterior vaginal wall, vaginal cyst, Wolffian duct

INTRODUCTION

Usually, Gartner’s duct cysts are on the anterolateral vaginal wall and its chances of being present on the posterior vaginal wall are relatively rare.[1] Its incidence of all the vaginal cysts is 12.5%. As it may arise from remnants of Wolffian duct, it may even appear in late middle age. Vaginal cyst can be histologically classified as epithelial, inclusion, mullerian, mesonephric, and urothelial in addition to other rare types.[2] These present with symptoms of visible palpable mass, dyspareunia, voiding disturbances, vaginal discharge, and pain.[3]

CASE REPORT

A patient, 54-year-old Para 4 live 4, presented herself in the outpatient Department of Gynaecology, SGRDIMSR, Amritsar, with chief complaints of mass protruding out from vagina for the last 7 years. On eliciting further history, she narrated that this mass initially was of lemon size which gradually progressed to the size of orange due to which the patient started having discomfort while changing posture/walking. Mass was not reducible and was associated with intermittent vaginal discharge.

She also gave h/o irregular periods for last 2 years with one episode of profuse bleeding with clots for 10 days prior to visit to the hospital. Previous menstrual history was uneventful with menstrual flow of 3-4 days/28 days/regular with moderate flow.

General, physical, and systemic examinations were unremarkable. P/V revealed a pedunculated posterior vaginal wall cyst with smooth pale pink intact surface lining hanging from middle level with 1.5 cm base protruding out of introitus [Figure 1]. Anterior vaginal wall was normal. Cervix was felt high up away from the base of mass. Uterus was upright, mobile, and of normal size. Bilateral fornices were clear. No cystocele and rectocele were demonstrable with and without straining.

Polypoidal/rectum (P/R) — Rectal mucosa was free, base of polypoidal cyst was free, and anterior rectal wall was otherwise smooth and normal.

On investigations: Hemoglobin 12.4 g%, platelet count 2.9 lacs/cmm, total leukocyte count 6600/cmm, blood urea

This is an open access article distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as the author is credited and the new creations are licensed under the identical terms.

For reprints contact: reprints@medknow.com

How to cite this article: Bala R, Nagpal M, Kaur M, Kaur H. Posterior vaginal wall Gartner’s duct cyst. J Mid-life Health 2015;6:187-90.
24 mg%, serum creatinine 0.7 mg/dl, and cancer antigen 125-12 µ/ml.

TVS — A well-defined cystic mass lesion of 6.5 cm × 4.5 cm × 3.7 cm protruding out of the vagina. Cyst contained fluid with dense internal echoes with no solid component suggestive of Bartholin’s cyst. Cervix and anterior vaginal wall were normal. Uterus was of the multiparous size with endometrial echoes in the central region. Right ovary had a well-defined anechoic cyst of 3.8 cm × 2.2 cm with no solid component in it. Left ovary was normal and no adnexal mass was seen in the Pouch of Douglas.

**Operative procedure and intraoperative findings**

Surgery was planned under regional anesthesia.

Dilatation and curettage was done, and normal looking scanty endometrial curettings were obtained.

Posterior vaginal wall cyst was excised by dissecting posterior vaginal wall from fourchette upward and identifying the base. Stalk was ligated, postvaginal wall cyst was removed, and posterior colpoperineorrhaphy was done [Figures 2-6]. Cervix felt normal, canal was regular, sound was passed up to two and half inches, scanty curettings were obtained, and specimen was sent for histopathological examination (HPE).

P/R: Rectal mucosa was found to be intact.

HPE [Figures 7 and 8]. Globular cystic skin covered soft tissue piece measuring 5 cm in diameter. On cut section, unilocular cyst is identified filled with thick jelly such as brownish fluid. Inner lining is smooth. Cyst wall shows tall columnar epithelial lining. The subepithelial tissue shows fibrocollagenous and muscle tissue. Impression: Benign epithelial cyst-mesonephric type.

Postoperative period was uneventful, and the patient was discharged in satisfactory condition.
Rare histopathological report has aroused the interest to report this case, as mesonephric duct cysts commonly present in anterior/anterolateral wall only on the rarest occasions if residual tissue of Wolffian duct persists, then mesonephric cyst may grow from that abnormal site.

**DISCUSSION AND CONCLUSION**

Gartner’s ducts are identified in approximately 25% of all adult women, and nearly 1% evolves into Gartner’s duct cysts. During embryological development, the mesonephric (Wolffian) ducts develop from their predetermined structures and later regress. Remnants often remain, however, until they develop a secretory mechanism, cause dilation of surrounding cells, and thus yield a Gartner's duct cyst, most often during and after late adolescence.

Classically, the cysts are solitary, unilateral, <2 cm in diameter, and are located in the anterolateral vaginal wall of the proximal, a third of the vagina. Gartner’s duct cysts are generally asymptomatic and most commonly diagnosed upon routine gynecologic examination, but patients’ complaints can include that of skin tag, dysuria, pressure, itching, dyspareunia, pelvic pain, or protrusion from the vagina if it enlarges to a detectable size, making it a candidate for surgical removal if large enough to cause obstetrical complications, the cyst can be drained to facilitate delivery.

To define the course of the Gartner’s duct cyst and differentiate it from other pathologic considerations and structures, magnetic resonance imaging can be a useful tool. Histologic examination may be employed to correctly identify the cellular remnants composed of nonmucin secreting low columnar or cuboidal epithelium [Figures 7 and 8]. The differential diagnosis can be included, but is not limited to Bartholin’s gland cyst or abscess, prolapsed urethra, prolapsed uterus, vaginal wall inclusion cyst, endometriosis, leiomyoma, sarcoma botryoides, malignant mass, Skene’s gland cyst, or abscess and ureterocele. Only in exceptionally rare and isolated cases, there has been a malignant
transformation identified. Large vaginal wall cysts are always symptomatic which compels the patient to visit a gynecologist. They mostly present with discomfort with vaginal discharge on and off, dyspareunia, or urinary complaints. It can be mistaken as uterovaginal prolapse easily. Examination solves the dispute. Radiographic evaluation for pelvis anatomy and pathology may be helpful. Not all patients presenting with mass per vaginum are necessarily a case of uterovaginal prolapse. Vaginal wall cyst prolapse is a rare entity and requires proper examination. Treatment is simple.

Financial support and sponsorship
Nil.

Conflicts of interest
There are no conflicts of interest.

REFERENCES
1. Kondi-Pafiti A, Grapsa D, Papakonstantinou K, Kairi-Vassilatou E, Xasiakos D. Vaginal cysts: A common pathologic entity revisited. Clin Exp Obstet Gynecol 2008;35:41-4.
2. Sahnidt WN. Pathology of vagina-vaginal cyst. In: Fox H, Wella M, editors. Haines and Taylor Obstetrical and Gynaecological Pathology. 5th ed. New York: Churchill Livingstone; 2003. p. 180.
3. Rashmi, Suneja A, Agarwal N, Guleria K, Yadav P. Vaginal mullerian cyst presenting as enterocele. J Obstet Gynaecol India 2009;59:74-6.
4. Letizia, Matthew J. DO, Kelly, Joseph V.M. Case Report: Gartner’s Duct Cyst. Emergency Medicine News 2011;33:35.