

Posterior Vaginal Wall Cyst: A Rare Case Report

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Abstract: Cyst of posterior vaginal wall is very rare. This is the case of a patient who presented with 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.

Keywords: Posterior vaginal wall, vaginal cyst, Wolffian duct

1. Introduction

Usually, vaginal cysts are on the anterolateral wall and rarely there are chances of being present on the posterior vaginal wall. [1] The incidence of all the vaginal cysts is 12.5%. The commonest type of simple vaginal cyst is the Mullerian cyst arising from the paramesonephric duct remnants. 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] Vaginal Cyst can be asymptomatic or can present with symptoms of visible palpable mass, voiding disturbances, vaginal discharge, dyspareunia and pain.[3]

2. Case Report

A patient, 41-year-old Para 6 live 6, presented herself in the outpatient Department of Gynaecology, Rama Hospital & Research Centre, Hapur, with chief complaints of mass protruding out from vagina for the last 4 years. On eliciting

further history, she narrated that this mass have gradually progressed. There is no history of bladder or bowel disturbances. Mass was not reducible and there is no history of increase in size of the swelling on straining or lifting heavy weights.

She also gave h/o irregular periods for last 2 years. Present cycles lasts for 10 days associated with heavy flow which lasts for 8-10 days. 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. On local examination, external genitalia were normal. An 4*3*2cm, non tender posterior vaginal wall cyst with smooth pale pink intact surface lining hanging from middle level was seen [Figure 1]. Anterior vaginal wall was normal. Cervix was felt high up away from the base of mass. Uterus was anteverted, mobile, and of normal size. Bilateral fornices were clear. No cystocele and rectocele were demonstrable with and without straining.



Figure 1

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

On investigations: Hemoglobin 11.4 g%, platelet count 2.1lacs/cmm, total leukocyte count 7600/cmm, blood urea 22mg%, serum creatinine 0.4 mg/dl.

TVS — A well-defined cystic mass lesion of 4.5 cm × 3.5 cm × 2.7 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 and B/L ovaries were normal .

Operative procedure and intraoperative findings

Patient was treated by surgical excision of the cyst under regional anesthesia.

A small transverse incision was made on posterior vaginal wall and 1 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

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

Globular cystic skin covered soft tissue piece measuring 5 cm in diameter. On cut section, unilocular cyst is identified filled with mucoid material . 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.

3. Discussion and Conclusion

Vaginal cysts are reported in approximately 1 in 200 females. During embryological development, the mesonephric (Wolffian) ducts develop from their predetermined structures and later regress. The most common vaginal cysts are Mullerian cysts arising from wolffian duct remnants.

Classically, the cysts are solitary, unilateral, <2 cm in diameter, and are located in the anterolateral vaginal wall of



Figure 2

the proximal, a third of the vagina.[4] Posterior vaginal wall cysts are generally asymptomatic and most commonly diagnosed upon routine gynecologic examination, but patients' complaints can include that of mass per vagina, dyspareunia, pressure symptoms, dyspareunia, pelvic pain.

To define the course of the posterior vaginal wall cyst and differentiate it from other pathologic considerations and structures, magnetic resonance imaging can be a useful tool. Confirmation can be done by histopathological examination which shows cellular remnants composed of mucin secreting tall columnar epithelium.

The differential diagnosis must include a rectocele, enterocele, Bartholins cyst, Gartner's cyst, Inclusion cysts and Endometriotic cyst. Only in exceptionally rare and isolated cases, there has been a malignant transformation identified.[4] Large vaginal wall cysts are always symptomatic which compels the patient to visit a gynecologist. Mostly patients present with discomfort with vaginal discharge on and off, dyspareunia, or urinary complaints. It can be mistaken as uterovaginal prolapse easily. Careful examination can clarify the diagnosis. Radiographic evaluation for pelvic anatomy and pathology may be helpful. Not all patients presenting with mass per vaginam are necessarily a case of uterovaginal prolapse. Vaginal wall cyst prolapse is a rare entity and requires proper examination. Treatment is surgical excision of the vaginal cyst which must be done carefully to avoid injury to rectum.

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Conflicts of interest

There are no conflicts of interest.

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