Case Report

Unusual case of posterior vaginal wall cyst

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Abstract
Cystic lesions of vagina are rare and are discovered incidentally during a gynaecological examination. A 40 year old multi parous woman presented with mass protruding through vagina since 10 years. It was insidious in onset, gradually increased to present size of 5.5 x 3.5 x 3.5cms. Mass was cystic in nature. Surgical excision of the cyst was done under spinal anaesthesia by sharp and blunt dissection. The cyst was filled with mucoid material and histopathology confirmed a mullerian cyst. Mullerian cysts are congenital cysts of vagina, usually reported in women of reproductive age. Usually these cysts arise at the level of cervix and extend anteriorly, but seldomly they may also extend posteriorly. This case report illustrates an unusual case of posterior vaginal wall cyst of Mullerian origin.

Keywords: Mullerian cyst, posterior vaginal wall, histochemical stain

1. Introduction
Cysts of vaginal wall are relatively rare and are often discovered incidentally during a gynaecological examination.1 Cysts of vagina have been classified according to histology of their lining epithelium into following types: Mullerian cysts, Epidermal inclusion cyst, Bartholin duct cyst, Gartner duct cyst, Endometroid cyst and other unclassified variety2,3. Among them Mullerian Cysts are 30%, Bartholin duct cyst 27.5%, Epidermal inclusion cyst 25% and remaining 17.5% is constituted by Gartner duct cyst, endometriotic cyst and unclassified type4. This case report illustrates an unusual presentation of posterior vaginal wall cyst of mullerian origin.

2. Case report
A 40 year old multi parous lady was referred to our outpatient department with the presenting symptom of a mass protruding through vagina since 10 years. Initially, the mass was small in size, insidious in growth to attain the present size. There was no history of dyspareunia, bowel or bladder disturbances. The mass increased in size on straining and lifting heavy weights and reduced completely on lying down.

Patient was a known hypothyroid on Eltroxin 100mcg once daily since 8 years. 5 months ago she has been diagnosed to be hypertensive and is on regular medication with Amlodipine 5mg once daily. Her general and other systemic examination did not reveal any abnormality. External genitalia was normal. A mass measuring 5.5 x 3.5 x 3.5cms was seen protruding through the introitus (figure 1). Speculum examination revealed the swelling arising from the posterior vaginal wall. There was no impulse on cough, overlying vaginal rugosities were absent. Superiorly the cyst extended 1 cm below the cervix and inferiorly up to the fourchette. Cervix was healthy and there was no descent. Bimanual examination revealed a retroverted normal sized mobile uterus and adnexae were not palpable bilaterally. On per rectal examination cyst wall was found separately and mucosa was free.
2.1 Differential diagnosis: Enterocele was excluded as cyst was located in middle and lower 3rd of vagina and there was no cough impulse. Rectocoele was ruled out by doing a per rectal examination. Bartholin’s cyst and gartner’s cyst were excluded with their locations. Absence of pain ruled out an Endometriotic cyst. Inclusion cysts are small cysts located in lower vagina.

2.2 Investigation: Blood biochemistry was normal. Transvaginal ultrasound showed normal uterus and ovaries. There was a well defined unilocular cystic lesion measuring 5.5x3.5x3.5cm seen in vagina. There was thick internal contents within. No evidence of fluid levels, layering or calcifications. No vascularity was seen within it. Pap smear was done as a screening test and report was negative for intraepithelial lesion or malignancy.

2.3 Treatment: Patient was subjected to surgical excision of cyst under spinal anaesthesia. A small transverse incision was made on posterior vaginal wall. Using sharp and blunt dissection the cyst was excised in total. Care was taken to avoid rectal injury (figure 2). Cyst in the upper part had fibrous attachment to vagina. Excess of vaginal mucosa excised and closed with absorbable sutures. Patient had an uneventful post operative period and was discharged on seventh postoperative day.

Grossly specimen of cyst was smooth, grey white externally. Cut section showed inner wall which was smooth and covered with mucoid material. Histological evaluation of specimen revealed cyst lining to be mucin secreting tall columnar epithelial cells which are characteristic of Mullerian cyst that was PAS positive. The walls showed chronic inflammatory cell infiltrate and congestion.

2.4 Follow up: Patient was followed up for 2 months. She was found to be asymptomatic and examination revealed no abnormality.

Figure 1 posterior wall cyst.

Figure 2 dissection of cyst in progress (finger in rectum to avoid injury).

Figure 3 picto micrograph of cyst wall lined by columnar epithelium.
3. Discussion

Cysts of vagina have been predominantly seen in women of reproductive age and also in children and postmenopausal women. Vaginal cysts are reported in approximately 1 in 200 female. Common cysts of vagina are Mullerian cysts. Usually mullerian cysts are asymptomatic, but may present as mass per vagina, dyspareunia, vaginal discharge and pain. They usually are single but occasionally may be multifocal. The mullerian cysts arise at the level of cervix and extend anteriorly but may also extend posteriorly. Large mullerian cysts present as anterior enterocele. Till date no evidence of epithelial hyperplasia or malignant change has been reported. The differential diagnosis between mullerian and gartner’s duct cyst requires histochemical evaluation of epithelial mucin production. Imaging modalities like USG and MRI are helpful in exact localization, number of cysts and communication with the surrounding structures.

Our case is of an unusual posterior vaginal wall mullerian cyst.

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