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Case Report

An unusual case of posterior vaginal wall cyst

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ABSTRACT

Vaginal cysts are rare and are mostly detected as an incidental finding during a gynecological examination. The commonest type of simple vaginal cyst is the Mullerian cyst arising from paramesonephric duct remnants. These are typically lined by columnar epithelium and contain serous or mucinous fluid. A 41 year old multiparous woman presented with mass per vagina since 6 months. On examination, posterior vaginal wall cyst of 8 x 4 x 3 cm was detected. Surgical excision of the cyst was done under spinal anaesthesia by sharp and blunt dissection. The cyst was filled with mucoid material and histopathological examination confirmed mullerian origin. This is a rare presentation of mullerian cysts developing posteriorly.

Keywords: Posterior vaginal wall cyst, Mullerian cyst

INTRODUCTION

Vaginal cysts are rare and are mostly detected as an incidental finding during a gynecological examination.¹ The commonest type of simple vaginal cyst is the Mullerian cyst arising from paramesonephric duct remnants.² These are typically lined by columnar epithelium and contain serous or mucinous fluid.¹ The vaginal cysts are divided into the following types depending upon the histology of their lining epithelium: Mullerian cysts (30%), epidermal inclusion cysts (25%), Bartholin duct cysts (27.5%), and remaining 17.5% is constituted by Gartner duct cyst, endometriotic cysts and unclassified type.¹⁻⁴ Mullerian cysts can be asymptomatic or can present with symptoms like mass per vagina, vaginal discharge, pain, dyspareunia, voiding problems etc¹. This report describes an unusual presentation of posterior vaginal wall cyst of mullerian origin.

CASE REPORT

A 41 year old multiparous lady came to our OPD with complaints of mass per vagina since 6 months. Her complaints were insidious in onset and have gradually progressed. There is no history of associated bowel or

bladder disturbances. There is no history of increase in size of the swelling on straining or lifting heavy weights. General and other systemic examinations were normal.



Figure 1: Vaginal cyst.



Figure 2: Vaginal cyst and urethral meatus.



Figure 3: Urethra is catheterized to show the posterior location of the cyst.

On local examination, external genitalia were normal. An 8x4x3 cm, non-tender cystic swelling covered by the vaginal mucosa was seen in the posterior vaginal wall. There was no impulse on cough, overlying vaginal rugosities were absent. Upper limit of the cyst was extending up to 1 cm below the posterior lip of the cervix and the lower limit was extending up to the fourchette. Cervix was healthy.

Exact size of the uterus could not be made out due to obesity on bimanual examination. However, uterus was anteverted and no other adnexal mass could be palpated. On per-rectal examination, the cyst wall was separate from the rectal wall.

On investigations, blood biochemistry was essentially normal. Transvaginal ultrasonography showed a normal sized uterus and ovaries with endometrial thickness of 5.5mm. A well-defined uniloculated cystic swelling was seen located posterior to the cervix in the posterior vaginal wall measuring 7.5x5x4 cm and volume of around 60cc. There was thick content within the cyst and no evidence of fluid levels, calcifications or layering. No vascularity was seen within it. Pap smear was negative for intraepithelial lesion or malignancy.

Differential diagnosis

Enterocoele was excluded as there was no cough impulse. Rectocele was ruled out by doing as per rectal examination. Endometriotic cyst was ruled out due to absence of pain. The location of the cyst ruled out Bartholin's cyst and Gartner's cyst. Inclusion cysts of the vagina are small cysts found at the lower end of vagina on the posterior surface, arising from inclusion beneath the surface of tags of mucosa resulting from perineal lacerations or from imperfect approximation in the course of surgical repair of the perineum. Histopathology of the lining epithelium of the cyst wall will differentiate inclusion cyst from mullerian cyst.

Treatment

Patient underwent surgical excision of the cyst under spinal anaesthesia. A small transverse incision was made on the posterior vaginal wall. The cyst was excised by sharp and blunt dissection. Care was taken to prevent

rectal injury. Cyst was attached to the vagina by fibrous attachment. Excess of vaginal tissue was excised and vaginal mucosa was closed with absorbable sutures. Patient had an uneventful post-operative period and was discharged on third post-operative day. She came back for follow up after 2 weeks and then after 3 months and was asymptomatic.

The gross finding of the specimen was smooth, grey white externally. Cut section showed smooth inner wall and contained mucoid material. Histopathological evaluation of the specimen revealed mucin secreting tall columnar epithelial cells as the cyst lining and was PAS positive. This was characteristic of mullerian cyst. The walls showed chronic inflammatory cell infiltrate and congestion.

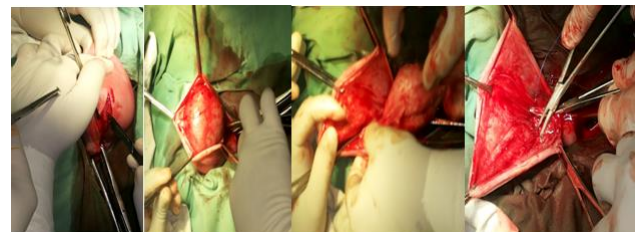


Figure 4: Steps of surgical excision of posterior vaginal wall cyst.

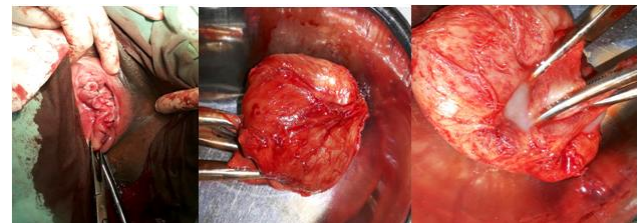


Figure 5: Gross specimen after excision containing mucoid material.

DISCUSSION

Vaginal cysts are reported in approximately 1 in 200 females.⁵ They are predominantly seen in women of reproductive age and also in children and postmenopausal women.⁶ The most common vaginal cysts are Mullerian cysts arising from paramesonephric duct remnants.² These are typically lined by columnar epithelium and contain serous or mucinous fluid.¹ Usually Mullerian cysts are asymptomatic, but can present as mass per vagina, dyspareunia, vaginal discharge and pain.¹ They are usually single but can be multifocal.⁷ Mullerian cysts arise at the level of cervix and usually extend anteriorly lying in relation to bladder and may present as cystocele. Large anterior Mullerian cysts may present as anterior enterocoele.⁸ There is no reported evidence of epithelial hyperplasia or malignant change.⁹ Imaging modalities like transvaginal sonography and MRI are helpful in exact localization, number and communication with surrounding structures.¹⁰ Confirmation is by

histopathological examination revealing mucin secreting tall columnar epithelial cells as the cyst lining and PAS positive. The differential diagnosis must include a rectocele, enterocele, Bartholin's cyst, Gartner's cyst, Inclusion cysts and endometriotic cyst. Treatment is surgical excision of the vaginal cyst which must be done carefully to avoid injury to rectum.

Our case is of unusual and rare large posterior vaginal wall Mullerian cyst.

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