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Case Report

Rare entity of urothelial cyst of vagina: Case report

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Abstract

Background: Urothelial cysts are rare vaginal wall cysts usually benign derived from periurethral and skene glands situated low in vagina in close proximity to urethra due to its urogenital sinus derivation. These are lined by transitional epithelium when observed under microscope for histopathological examination. Here we are reporting one such uncommon case report of urothelial cyst.
Case Report: A 26 year old nulligravida came to outpatient department with complaints of mass per vaginum since 7-8 months associated with discomfort and dyspareunia. On per speculum examination, the swelling was 5x4cm occupying the left lateral wall of lower vagina till the level of introitus. The swelling was fluctuant and cystic, non-tender with distinct margins, not associated with any palpable regional lymphnodes. Underwent cyst excision and HPE s/o benign urothelial cyst.
Conclusion: It has good prognosis as it's a benign entity however long term surveillance to be considered.

Keywords: Urothelial cyst, Vaginal wall cyst, Benign.

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1. Introduction

Vaginal wall cysts are rare entity and usually present as a spectrum ranging from small asymptomatic painless lesions to cysts large enough to cause pain, pressure due to mass effect, discomfort and other vulvovaginal, urinary complaints.[1,2] Various types of vaginal cysts are identified depending on the histopathology and they are classified as mullerian cysts, squamous epithelial inclusion cysts, Bartholin gland cysts, gartner duct cysts and urothelial cysts.[3]

Urothelial cysts are rare vaginal wall cysts usually benign derived from periurethral and skene glands situated low in vagina in close proximity to urethra due to its urogenital sinus derivation. These are lined by transitional epithelium when observed under microscope for histopathological examination.[4] Here we are reporting one such uncommon case report of urothelial cyst.

2. Case Report

A 26 year old nulligravida came to outpatient department with complaints of mass per vaginum since 7-8 months associated with discomfort and dyspareunia. It was initially small in size which has gradually progressed to the present size of small lemon. She attained menarche at the age of 12 years and had history of regular cycles since then with moderate flow for 3 to 4 days once in every 28 to 30 days with no pain and her last menstrual period was 7 days from the time of presentation to OPD. There were no complaints of discharge per vaginal, bowel and bladder complaints associated with it. Patient had no previous medical or surgical history.

General physical examination revealed normal vital signs, no abnormality detected in respiratory and cardiovascular systems. Per abdomen examination revealed that she had soft, non-tender, no organomegaly as findings.

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On local examination the external genitalia appears to be apparently healthy.

On per speculum examination, the swelling was 5x4cm occupying the left lateral wall of lower vagina till the level of introitus. The swelling was fluctuant and cystic, non-tender with distinct margins, not associated with any palpable regional lymphnodes.

Ultrasound s/o vaginal cyst. MRI pelvis showed hypoechoic cystic lesion arising from left lateral wall of size of 4.7x4.2x2.7cm with no evidence of septations or hemorrhage s/o Gartners duct cyst.

2.1. Management

Under spinal anaesthesia and strict aseptic precautions, patient in dorsal lithotomy position, parts painted and draped, bladder drained with foleys catheter, anterior and posterior vaginal walls retracted with sims speculum and cyst seen, vertical incision was given over the cyst wall after infiltrating the base with normal saline to delineate the margins and then cyst was exposed and excised in to and sent for HPE. In the postoperative period, patient was given antibiotics and analgesics and the recovery was good, the patient had no complaints hence she was discharged the next day.

2.2. HPE report

Gross appearance-soft tissue fragments with mucosa on one end measuring 4.5x3x1cm. Cut section shows cystic area measuring 1.5x1.2cm and mucosa on other end, external surface smooth. No growth / solid areas seen, wall thickness 0.1-0.3cms. Microscopic appearance-sections from the cyst wall show lining of transitional epithelium against a thin fibrocollagenous wall with many thin walled vessels, no evidence of atypia. Features s/o benign urothelial cyst.

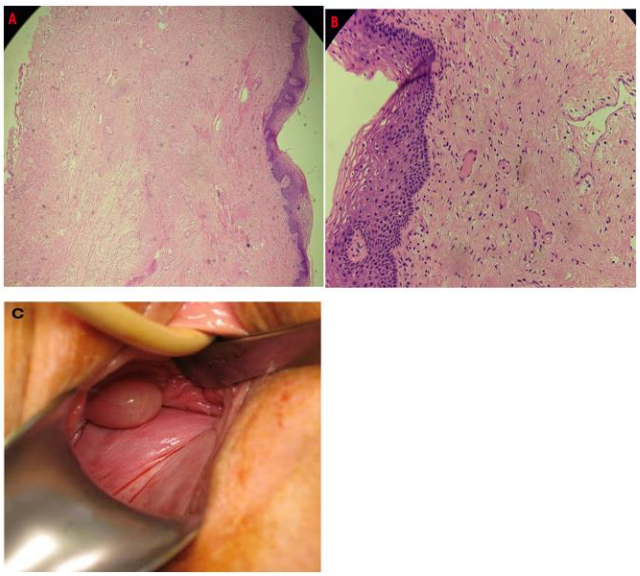

Figure 1: Histopathology slides (clinical appearance of cyst)

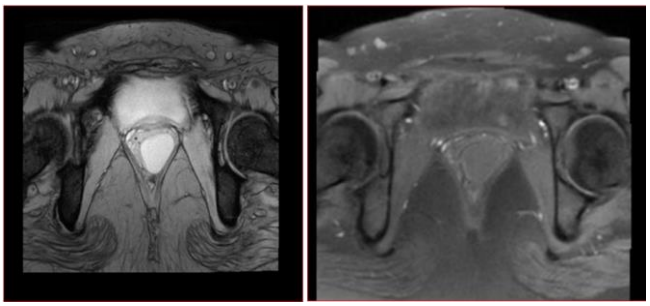

Figure 2: MRI images of urothelial cyst

3. Discussion

Vulvovaginal areas are embryologically contributed by mesonephric, paramesonephric ducts, urogenital sinuses.[5] Urothelial cysts are formed due to abnormal congenital epithelial remnants, expansion of paraurethral glands and ducts, periurethral skene's glands during fetal development or surgical trauma, friction of connective tissue as acquired causes. They are not caused by sexually transmitted diseases or infections.[6] Majority of them go undiscovered as they are asymptomatic in about 75% cases however few of them present in varying sizes upto 5cm as well defined cysts close to urethra with mucin, pus or cell remnants as contents. Large sizes usually cause discomfort, pain, itching, or urinary disturbances. Diagnosis of urothelial cysts include strong clinical suspicion, thorough pelvic examination, to rule out medical disorders, STIs. Most cases don't need radiological interventions however if cyst is large then it may be considered.[7] Vaginal biopsy and FNAC in doubtful cases. There are no significant complications however it may rarely lead to abscess formation resulting in infections, rupture, bleeding, secondary infections, damage to muscles, nerves and vital blood vessels during surgery, post-surgical infection, some rare cases of large cysts may necessitate c-section during pregnancy. Various treatment measures include wait and watch approach as most of them regress on their own, sitz bath, antibiotics to prevent infections and surgical intervention by complete excision if it is symptomatic and causing discomfort. During pregnancy large cysts can be drained or surgically removed to facilitate vaginal delivery or if its not possible c-section may be considered as an option.[8] Post-op-care and follow up is important.

4. Conclusion

In conclusion based on various case reports and reviews urothelial cysts are rare vulvovaginal cysts and clinican must consider various parameters like the site of occurrence of cyst, number, size, extent, patients complaints in mind and proceed in step wise clinical and radiological examinations if required and differential diagnosis to be made and then formulate management protocols which can be simple excision or consider multidisciplinary approaches in single or multiple sittings. Recurrence of cyst post-surgery is

unknown. It has good prognosis as it's a benign entity however longterm surveillance to be considered.

5. Source of Funding

None.

6. Conflict of Interest

Authors declare no conflict of interest.

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