Ureterocele Presenting as Vaginal Mass in a Pregnant Woman

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Abstract

A 21-year-old pregnant presented with vaginal mass. On examination a cyst was noted in anterior wall of vagina. On evaluation it is diagnosed as ectopic ureterocoele inserting into vagina. As patient has no other complaints conservative management is advised and patient is doing well.

Keywords: Pregnancy, Ureterocoele, Mass Per Vagina, Duplex Ureter

Introduction

Ureterocoele is cystic enlargement of the distal most ureter. It can have normal orthotopic insertion into urinary bladder or ectopic insertion more caudally. Usual presentation is with continuous incontinence in the paediatric age but rarely can present with atypical symptoms especially in adults.1

We present a case of ectopic ureterocoele presented as vaginal mass in pregnancy.

Case Report

A 21-year-old primigravida with 6 months of gestational age presented to our outpatient department with complaints of intermittent mass per vagina. There was no history of pain or bleeding per vagina. On per speculum examination there was a focal cystic mass noted in left anterior fornix (Figure 1). Cervix appeared normal. Obstetric examination is unremarkable.

Based on above findings we suspected Gartner duct cyst and ureterocoele as possibilities. Ultrasound did not reveal any abnormality. MRI examination was performed which showed Duplex collecting system in left kidney with two ureters. The upper moiety ureter is mildly dilated and shows ectopic insertion in left anterior aspect of upper vagina (Figure 2). There is focal cystic dilatation of about 13x21x20mm size at vaginal insertion suggestive of Ureterocoele (Figure 3). Lower moiety ureter has orthotopic insertion into urinary bladder.

The mass was manually reduced. As patient has no other symptoms and has normal kidney function, we advised conservative management after taking urologist opinion. Patient had uneventful antenatal course and...
underwent elective LSCS as she had contracted pelvis. Postnatal period was uneventful and no vaginal mass seen on per speculum examination.

**Discussion**

Ureterocele is defined as abnormal congenital dilation of distal most ureter. It is 4 to 7 times more common in females than males. Ureterocele is of two types based on location. 1) Intravesical type where it occurs at normal vesicoureteral junction. 2) Extravesical type where ureter has ectopic insertion into bladder neck and urethra or rarely into vagina as in our case. Ectopic type is almost always associated with duplicated collecting system. Ureteral duplication occurs when two separate buds arise from a single mesonephric duct, which drain single kidney. Upper renal moiety drains inferior to lower renal moiety and ends in ureterocele. Lower renal moiety has orthotopic insertion into bladder, however with increased incidence of vesicoureteral reflux (Wiegert Meyer law).

Clinical presentation of ectopic ureterocele is variable, depends on its location and degree of stenosis of mucosal opening. Usual presentation is urinary incontinence with continuous dribbling of urine in paediatric age group. Rarely it can present as a vaginal mass due to complete stenosis of opening as in our case.

There are many causes for a vaginal cyst which can be diagnosed by careful history and detailed physical examination. Patient history should include onset and duration of symptoms and presence of pain, dyspareunia, voiding symptoms and any history of urologic or gynaecological procedures. A history of recurrent urinary tract infection and intermittent incontinence may indicate urethral diverticulum whereas continuous incontinence may represent ectopic ureterocele.

During physical examination lesion should be assessed for its location, mobility, consistency and tenderness. Pelvic imaging may be needed for further characterization of lesion by means of ultrasound, Micturating cystourethrogram, CECT and MRI. Among the imaging modalities pelvic MRI is most efficient in diagnosing various vaginal lesions and other pelvic lesions.

Current approach in management of ectopic ureter in vagina with incontinence is to remove anomalous kidney and ureter using nephron sparing surgery, if kidney is non-functional. If the upper pole moiety function is normal ureteroneocystostomy can be performed. But our patient had no symptoms of urinary incontinence or urinary tract infection and has normal renal function we advised conservative management with regular follow up.

**Conclusion**

Ectopic insertion of ureter into vagina usually presents with continuous urinary incontinence. Rarely it can present as a vaginal mass without urinary symptoms. Hence detailed examination and if required pelvic imaging should be performed to characterise vaginal mass.

**End Note**

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References


