

Giant Acquired Ureterocele in Adult Male: A Rare Case Report

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Abstract: Ureterocele is dilatation of lower ureter at its entry into urinary bladder. It is classified as single or duplex system and acquired or congenital. Acquired type is rare and seen in adults. We report a case 17 years old male presented with voiding lower urinary tract symptoms and intermittent flank pain. He had history of frequent spontaneous stone passage with left colicky pain two years back. On USG and IVP, diagnosis was made as left renal hydronephrosis with hydroureter due to left side giant intravesical ureterocele. Patient was managed by endoscopic transurethral incision of ureterocele..

Keywords: Giant ureterocele, Acquired, voiding lower urinary tract symptoms

INTRODUCTION

Ureterocele is dilatation of lower ureter at its entry into urinary bladder. It is classified as acquired or congenital [1]. Congenital ureterocele most often associated with a duplicated collecting system and it occurs due to incomplete dissolution of Chwallas' membrane. Diagnosis may be made with ultrasonography in perinatal period or in early childhood. Acquired type is rare, seen in adults and associated with other lower ureteric pathologies. In adults intravenous urography demonstrates dilated distal ureter, appearing as a "cobra head" or "spring onion" deformity with peripheral hollows [1,3]. Endoscopic incision of ureterocele relieve the obstruction and preserve the renal function. Open surgery is reserved for failed cases[4].

CASE PRESENTATION

17 years old male patient presented with the chief complains of left sided intermittent flank pain, weak urinary flow, straining during micturition and two episodes of gross hematuria for last six months. He had history of frequent spontaneous stone passage with left colicky pain two years back and abdominal ultrasonogram was normal that time. No past history of any surgery, burning micturition, any chronic illness, hypertension or diabetes. On examination his vitals were stable, abdomen was soft with no tenderness in left renal angle and external genitalia were normal. His laboratory investigations including renal function test were within normal range. Uroflowmetry showed prolonged voiding and poor flow suggesting obstruction.

Abdominal ultrasonogram showed left kidney gross hydronephrosis with hydroureter upto lower part. A large cystic dilatation seen at vesicoureteric junction suggestive of giant ureterocele [Figure 1].

Intravenous urogram showed bilateral single system with left hydroureteronephrosis, tortuous ureter and delayed function. A balloon like large intravesical swelling at left vesicoureteric junction [figure2 and 3]. Right renal unit was normal functioning.

Cystoscopy showed intravesical left sided giant ureterocele obstructing the urinary bladder neck with stenotic opening [Figure 4]. Patient was treated by transeurethral endoscopic incision of ureterocele and discharged uneventfully (Figure 5). On follow up at one year patient is asymptomatic with normal urinary flow and on radiologic imaging mild hydronephrosis with no vesicoureteral reflux.



Fig. 1: Ultrasonogram showing large intravesical ureterocele



Fig. 2: 20 minutes IVU showing right sided normal functioning kidney with delayed functioning left kidney and large filling defect in bladder suggestive of giant ureterocele



Fig. 3: One hour IVU showing gross left sided hydroureteronephrosis with tortuous ureter and giant ureterocele

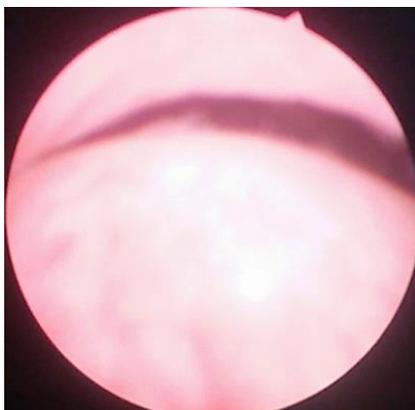


Fig. 4: Cystoscopy showing giant ureterocele obstructing bladder neck



Fig. 5: Ureterocele after transurethral endoscopic incision

DISCUSSION

An ureterocele is a defect where the portion of the ureter at its entry into urinary bladder swells up like a balloon. The ureteral opening is often very small and can obstruct urine flow. This obstruction can affect the kidney development and work [3]. It is classified as single or duplex system and acquired or congenital.

Congenital ureterocele associated with a duplicated collecting system. It's occurred in approximately 1 out of every 4,000 babies and is 5 times more common in girls than in boys with a left sided preponderance [1].

Acquired type is rare and seen only in adults. It is always associated with single system and other pathologies like impacted stone, previous surgeries, stone passage and schistosomiasis. In adults intravenous urography demonstrates dilated distal ureter, appearing as a "cobra head" or "spring onion" deformity with peripheral hollows [2,3].

Transurethral endoscopic incisions of ureterocele relieve the obstruction and preserve the renal function in most cases. Decision regarding further treatment like re-implantation for reflux and nephrectomy in case of dysplastic or non-functioning kidneys may require [4,6]. In our case renal function was intact and obstruction was removed, no further intervention was required. Because of rarity of the presentation and diagnosis of the condition, urologist needs to be aware of aetiology and appearance. Treatment options depend on the extension of the ureterocele, obstruction to draining system and its complications [5].

CONCLUSION

Acquired ureterocele is a rare negative consequence of many pathological conditions of lower ureter. Since few cases have been reported in literature, clinicians need to have understanding and orientation

towards aetiopathology, diagnosis, investigations and treatment of this condition.

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