Ureterocele with impacted stone

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Accepted 17 June 2020

DESCRIPTION

A 24-year-old man presented with urinary frequency, urgency and post-void dribbling of 4 weeks duration. Patient had no history of haematuria, urinary retention, dysuria, graveluria, fever or flank pain. His past medical history and family history were insignificant. General physical examination and systemic examination were normal. Ultrasound of the abdomen showed normal bilateral kidneys and 3×2 cm mobile echogenic shadow in base of the urinary bladder suggestive of bladder stone. X-ray of kidney, ureter and bladder confirmed a radio-opaque hyperdense stone in the pelvis (**figure 1**). Routine work up including haemogram, renal function and serum electrolytes were within normal limits. Urinalysis revealed six to eight pus cells and culture was sterile. Uroflowmetry showed Q max of 12.2 mL/sec for voided volume of 260 mL. Patient was counselled for endoscopic cystolithotripsy under regional anaesthesia. On endoscopy, urinary bladder showed no evidence of stone. To our surprise, left ureteric orifice was dilated and seen as an outpouching inside the urinary bladder with stone projecting from the lumen suggestive of ureterocele (**figure 2A**). Using 26 French resectoscope and Collins knife, inverted U shaped incision was given and stone extracted into the urinary bladder (**figure 2B**). Stone was fragmented with holmium laser (365-micron fibre, Energy – 1 Joule, Frequency – 15 hertz/sec) and fragments were removed with Ellik evacuator. The ureteric orifice

Figure 2 (A) Intraoperative cystoscopy image showing outpouching of left ureter with impacted stone projecting from the orifice. (B) Ureteric orifice incision using Collins knife to extract the impacted stone.

Figure 3 Micturating cystogram showing left grade 4 vesicoureteric reflux.

was widely open and showed no residual stone. A 14 French Foley catheter was placed. Postoperative period was uneventful and catheter was removed after 2 days. On follow-up, micturating cystogram showed grade 4 vesicoureteric reflux (**figure 3**). Patient is asymptomatic and urine culture is sterile at 1-year follow-up.

Contributors KMP and PS collected data and drafted the initial manuscript, SM collected images and edited them, KMP revised

Figure 1 Plain X-ray of kidney, ureter and bladder showing 3×2 cm dense radio-opaque stone in the pelvis.

Patient's perspective

I am very thankful to whole team of doctors and hospital staff for appropriate intervention and management of my disease.

Learning points

- ▶ Ureterocele with stone impacted at distal end may mimic as urinary bladder stone.
- ▶ Ultrasound and plain X-ray of the pelvis can be deceptive. CT is essential before surgical intervention to confirm the diagnosis and rule out any anomalies.
- ▶ Correct diagnosis is indispensable to prognosticate the patient about the disease and its sequelae.

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To cite: Parmar KM, Sharma P, Mandal S, et al. *BMJ Case Rep* 2020;**13**:e236301. doi:10.1136/bcr-2020-236301

the manuscript, SK gave critical comments. All authors have read and approved the manuscript.

Funding The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests None declared.

Patient consent for publication Obtained.

Provenance and peer review Not commissioned; externally peer reviewed.

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