CASE REPORT

Prolapsed ureterocele, with calculi within, causing urinary retention in adult female

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Accepted 11 March 2014

SUMMARY

A case of a simple ureterocele, containing multiple calculi within, prolapsing through the urethra and presenting as a vulval mass in a woman aged 35 years with urinary retention. Following confirmation of diagnosis by plain X-ray and sonography, the calculi were extracted by incising the ureterocele, which was reduced in the bladder and later resected transurethrally.

CASE PRESENTATION

A 35-year-old woman presented to our emergency department with a vulval mass with urinary retention. Occasionally, she had a mild left flank pain and lower urinary tract symptoms for which she never consulted any physician. There was no other relevant medical history or comorbid condition. Local examination revealed a plum—coloured interlabial mass (figure 1A) emerging from the meatus, which was firm in consistency and was irreducible. A suprapubic bulge was found on abdominal examination.

BACKGROUND

Ureteroceles are common in children and are usually associated with the upper moiety of a duplex system. Those associated with a single renal system are less common, and are usually found in adults. Intravesical simple ureteroceles rarely prolapse through the external urethral meatus. The purpose of our presentation was to lay emphasis on prolapsed ureteroceles as a differential diagnosis for vulval mass with urinary retention and its management.

INVESTIGATIONS

X-ray and sonography revealed a prolapsed left simple ureterocele with multiple calculi and left hydroureteronephrosis (figure 1B–D,G). A subsequent intravenous urogram was suggestive of left hydroureteronephrosis with a redundant ureterocele wall (figure 1E,G).

Figure 1 (A) Prolapsed ureterocele presenting as vulval mass (arrow). (B) X-ray pelvis showing multiple calculi inferior to pubic symphysis (arrow). (C and D) Abdominal ultrasonography showing a ureterocele and calculi. (E) Intravenous urography showing a redundant ureterocele (arrow). (F) Intraoperative picture showing transurethral incision of the ureterocele. (G) Intravenous urography showing left hydronephrosis.

To cite: Sinha RK, Singh S, Kumar P. *BMJ Case Rep* Published online: [please include Day Month Year] doi:10.1136/bcr-2013-202165

DIFFERENTIAL DIAGNOSIS

This case is reported to highlight a prolapsed ureterocele with calculi within as a differential diagnosis when evaluating masses at the introitus with a urinary retention such as cystocele or large rectocele.

TREATMENT

Calculi were extracted after incising the ureterocele and ureterocele reduced with Foley catheter left indwelling. Endoscopic resection of the redundant ureterocele wall was carried out and the postoperative period remained uneventful (figure 1F).

OUTCOME AND FOLLOW-UP

These patients require follow-up for a few months after surgical therapy to look for residual reflux and hydronephrosis.

DISCUSSION

A ureterocele is a congenital cystic dilation of the terminal ureter and occurs more frequently in women (4:1 ratio). Eighty per cent of all ureteroceles arise from the upper poles of duplicated systems.¹ A simple (orthotopic) ureterocele is a very rare condition and is usually found in adults. Prolapse of the orthotopic ureterocele is uncommon and is found more often in women due to short urethra.^{2–4} A prolapsed ureterocele may present as a bleeding mass at introitus with irritative voiding symptoms, urinary retention and flank pain. It has been iatrogenically ruptured in the past when it was considered to be a vaginal cyst.⁵ In prolapsed reducible cases, manual reduction and endoscopic incision or transurethral unroofing of the ureterocele are carried out.

Calculi within a ureterocele are not uncommon but calculi within a prolapsing ureterocele are rare.⁶ Prolapsed ureteroceles with calculi within are likely to be irreducible; they require incision of the ureterocele and extraction of calculi and reduction of the ureterocele with subsequent endoscopic resection/incision.⁷

Learning points

- ▶ A prolapsed ureterocele with calculi within is a rare condition.
- ▶ A prolapsed ureterocele should be kept in differential diagnosis of vulval mass presenting with urinary retention.
- ▶ Treatment is a simple incision of the ureterocele with extraction of calculi.

Contributors RKS participated in data collection, data interpretation, manuscript writing and manuscript editing. SS and PK participated in data collection and manuscript editing.

Competing interests None.

Patient consent None.

Provenance and peer review Not commissioned; externally peer reviewed.

REFERENCES

- 1 Schluskel RN, Retik AB. Ectopic ureter, ureterocele and other anomalies of the ureter. In: Wein AJ, ed. *Campbell-Walsh urology*, 9th edn. Philadelphia: Saunders Elsevier, 2007;3397–8.
- 2 Dogra PN, Talwar M, Jadeja N. Endoscopic management of prolapsing intravesical ureterocele in an adult female—a case report. *Int Urogynecol J* 2000;11:127–9.
- 3 Sen I, Onaran M, Tokgoz H, et al. Prolapse of a simple ureterocele presenting as a vulval mass in a woman. *Int J Urol* 2006;13:447–8.
- 4 Waihenya CG. Prolapsed single system ureterocele in a female adult: case report. *East Afr Med J* 2008;85:197.
- 5 Takako M, Taku K, Noriyasu H, et al. Iatrogenic rupture of prolapsed ureterocele in adult female. *Jpn J Clin Urol* 2006;60:143–5.
- 6 Laird RM. Prolapse of an ureterocele in an adult. *Br J Urol* 2008;26:72–4.
- 7 Wines RD, O'Flynn JD. Transurethral treatment of ureteroceles. *Br J Urol* 2008;144:207–16.

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