Prostatic urethral cyst: a rare cause of acute urinary retention in a young male

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DESCRIPTION

A 31-year-old male medical professional presented with acute urinary retention. He had frequency, straining and sense of incomplete emptying of 3-day duration. There was no history of dysuria, fever or urethral instrumentation. He is unmarried and sexually inactive. On examination, he was conscious and his vitals were stable. Systemic examination showed palpable urinary bladder up to umbilicus suggestive of urinary bladder outlet obstruction. Ultrasonography of the abdomen showed cystic structure 2×2 cm at the bladder neck and bilateral kidneys were normal. A 14-Fr Foley catheter was placed for relief of urinary retention, which recorded 630 mL of residual urine. Routine work-up, including haemogram, renal function and urine analysis, was normal. A contrast-enhanced CT of the abdomen with urography showed a well-defined cystic lesion arising from prostatic urethra and projecting into urinary bladder lumen suggestive of prostatic cyst (figure 1A,B). Rest of the urinary bladder, prostate and kidneys was normal. He was counselled about the various possible differential diagnoses and treatment options, including needle aspiration and transurethral resection. Patient chose to undergo transurethral resection of cyst, which was done under regional anaesthesia. Intraoperatively, urinary bladder showed mild trabeculations and 1×2 cm thick walled cyst was seen extending from 6 o’clock to 10 o’clock position at bladder neck causing narrowing of the lumen (figure 2A,B). Clear fluid was aspirated endoscopically. Using 26-Fr resectoscope, complete resection of prostatic cyst was done and 22-Fr three-way Foley’s catheter was placed with continuous bladder irrigation (figure 2C,D). Postoperative period was uneventful. Histopathological examination showed cyst wall lined by transitional epithelium of prostatic urethra comprised of fibrocollagenous tissue and smooth muscle fibres. At 3-month follow-up, he is asymptomatic and doing well.

Figure 1 Contrast-enhanced CT of the abdomen with urography images. (A) Axial image showing cystic lesion at the level of urinary bladder neck projecting into the lumen. (B) Coronal image showing cystic lesion arising from prostatic urethra with bilateral normal excretory kidneys.

Figure 2 Intraoperative images showing (A) trabeculated urinary bladder suggestive of bladder outlet obstruction, (B) epithelial lined cystic lesion in prostatic urethra at the level of urinary bladder neck extending from 6 o’clock to 10 o’clock position, (C) resection of cyst and (D) raw area with widely opened urinary bladder neck after cyst resection.
Patient's perspective

I am pleased with treatment and proper guidance by the whole team of doctors.

Learning points

► Prostatic urethral cyst is a rare cause of acute urinary retention.
► Transurethral complete resection of cyst is the preferred surgical choice with possibly less chance of recurrence.

Contributors

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