

Ureteric Injury Secondary to Inadvertent Cannulation by Suprapubic Catheter

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An 80-year-old female presented to the emergency department with obstruction of her long-term suprapubic catheter (SPC). The patient's background was significant for multiple medical comorbidities including congenital left renal hypoplasia and a neurogenic bladder. Following SPC exchange and balloon inflation, the patient developed abdominal pain and hematuria, and urine drainage ceased. Imaging was performed to identify SPC position and investigate for complications.

CT demonstrated inadvertent right ureteric cannulation with intra-ureteric balloon inflation. Retroperitoneal free gas was present, suggestive of ureteric perforation (**Figure 1**). The balloon was deflated and repositioned within the bladder under ultrasound guidance before urgent endoscopy. Cystoscopy demonstrated bloody efflux from a patulous right ureteric orifice. A 24 cm 6Fr ureteric stent was inserted, and the patient made an uneventful recovery. Staged ureteroscopy was performed 3 months later, which found a distal ureteric stricture correlating to the site of previous balloon inflation.

FIGURE 1.

CT axial and sagittal slices. The inflated catheter balloon is visualised within the pre-sacral space, in the right distal ureter (black arrow). Retroperitoneal free gas (blue arrow) is seen tracking away from the catheter tip (white arrow).



Key Words

Ureteric injury, neurogenic bladder, suprapubic catheter

Competing Interests

None declared.
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Complications associated with long-term catheters include urinary tract infections, and sphincter and urethral erosion[1]. Ureteric cannulation by indwelling catheters is rare. Neurogenic bladders are postulated to be a risk factor because of development of patulous ureteric orifices from long-standing detrusor overactivity and vesicoureteral reflux[2]. As few as seven cases of indwelling catheter related ureteric injuries have been

reported. Interventions used in the management of these cases include ureteric stents, percutaneous nephrostomy, primary surgical repair, and formation of a urinary conduit[3].

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