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# Delayed Presentation of Small Bowel Injury During Suprapubic Catheterisation

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## ABSTRACT

We present a case of small intestine injury resulting from suprapubic catheter insertion. This case is of particular interest for three reasons. Firstly, the presentation of the injury was delayed by three months, until the time of the first catheter exchange. Secondly, the injury was managed conservatively, without surgical exploration. Finally, the injury occurred using a newer, Seldinger-type suprapubic catheter insertion kit.

## INTRODUCTION

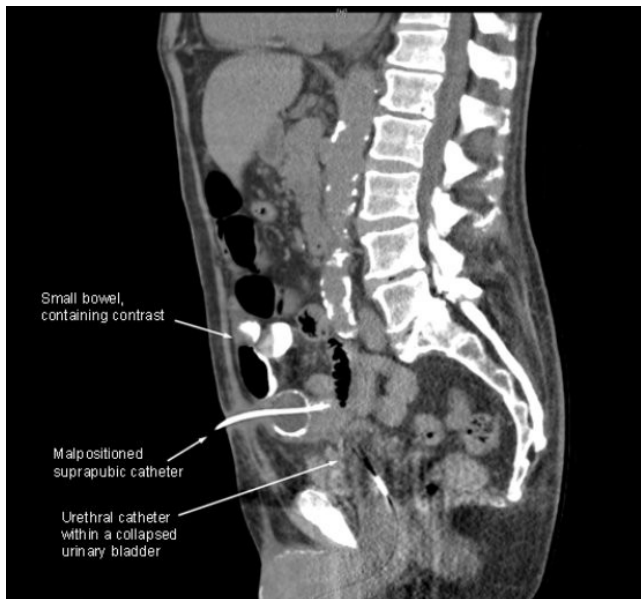
All surgeons who insert suprapubic catheters will be aware of the feared complication of enteric injury. Indeed, in the UK, the National Patient Safety Association has recently issued a rapid response report regarding this. (1) We present an interesting case in featuring an unusual presentation of this complication, with an alternative management strategy.

## CASE REPORT

A 66-year-old gentleman presented with chronic retention and obstructive uropathy. Urethral catheterisation was performed and his renal function stabilised. Owing to significant co-morbidities, transurethral prostatectomy was felt inappropriate, and alfuzosin and finasteride commenced. A trial without catheter after 3 months was unsuccessful, with the patient failing to void and developing a residual volume of greater than 1000mls. A suprapubic catheter was inserted under local anaesthetic, using a Seldinger technique, without cystoscopic guidance. Admission overnight and intravenous antibiotics were required, due to pain at the insertion site and a low-grade pyrexia, assumed to be due to urinary infection. These subsequently settled, and the patient was discharged home with a short course of ciprofloxacin.

After three months, the patient underwent exchange of the suprapubic catheter in the community, performed by an experienced nurse. He presented to our admissions unit the following day, with a greenish fluid identified as small bowel effluent draining from the suprapubic catheter. He remained pain-free and systemically well, with no evidence of sepsis or peritonitis. Immediate flexible cystoscopy showed turbid urine in the bladder, and no sign of the suprapubic catheter. The bladder was catheterised urethrally. A CT scan was performed with contrast instilled via the suprapubic catheter. This demonstrated that the catheter now lay within a loop of small bowel (Figure 1). Given the absence of peritonitis or systemic infection,

the injury was managed conservatively as a controlled entero-cutaneous fistula. The suprapubic catheter was removed after two weeks and a dry dressing applied. The patient recovered without further complication.



## DISCUSSION

Enteric injury is a recognised complication of suprapubic catheterisation, occurring in 2.4-2.7% of cases in published series. (2) Patients with previous lower abdominal/pelvic surgery may be particularly at risk. The majority of these injuries are detected shortly after insertion due to enteric content draining from the catheter, failure to drain the bladder, the development of peritonitis or systemic sepsis, or a combination of the above. Our case however, illustrates that recognition of the injury may be delayed until the first catheter change. There are two previous case reports documenting this phenomenon, involving a small bowel injury (3) and a sigmoid injury (4) respectively. In both of these cases however, the injury was managed by laparotomy and definitive repair. Our case illustrates that in selected cases these injuries can be managed conservatively, as a controlled fistula. This course of action was made possible by the proximity of the injured bowel loop to the skin, as demonstrated on the CT image, and the absence of leakage into the peritoneum. A further point of interest lies in the type of suprapubic kit used for the insertion. The MediPlus™ Seldinger suprapubic insertion kit has proven popular with urologists (5), and it has been suggested that it may be safer than existing devices (although there are no randomised data to support this as yet). Whilst this may prove to be true, our case illustrates that the risk of bowel injury persists, and that patients should be counselled fully regarding this prior to undergoing the procedure.

## REFERENCES

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