

# Early and late complications of suprapubic cystostomy – Report of two cases

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## ABSTRACT

Suprapubic cystostomy (SPC), although a common procedure, may be associated with complications. We present two cases of transperitoneal tract of SPC. The early complication was ileal perforation, resulting in perforation peritonitis and late complication was incisional hernia around the SPC tract. Avoiding peritoneal violation helps in preventing such complications.

## INTRODUCTION

Suprapubic cystostomy (SPC) is one of the most common urological procedures. As with any procedure, it is associated with the early and late complications.<sup>[1]</sup> We present images of two complications of SPC; incisional hernia with SPC catheter *in situ* and one ileal perforation.

## CASE REPORTS

### Case 1

A 75-year-old female, who was on suprapubic indwelling catheter for atonic bladder presented to the urology outpatient department for routine SPC change. She had been on SPC for the past 8 years, with regular catheter change in another hospital. On examination, she had a 4 cm × 4 cm, reducible lump with cough impulse beside the SPC, suggestive of incisional hernia [Figure 1a]. Noncontrast computed tomography (CT) was done which confirmed the findings and the hernia neck was wide [Figure 1b]. She was advised surgery as the first option of management but declined.

### Case 2

A 78-year-old male presented to the emergency department with the features of perforation

peritonitis. He had a history of SPC insertion for stricture urethra with retention of urine 5 days earlier. Contrast-enhanced CT showed the SPC tract passing through the ileal loop and entering the bladder [Figure 2a]. He underwent exploratory laparotomy and the finding was confirmed [Figure 2b]. The ileal perforation was closed primarily, and SPC tract was revised. He improved with a prolonged postoperative course and was discharged 18 days after the laparotomy.

## DISCUSSION

SPC is a relatively safe procedure, provided, the peritoneum is not violated. Transperitoneal SPC tract may cause bowel injury, resulting in perforation peritonitis and severe morbidity. Such possibility should be suspected in any patient having features of peritonitis 2–3 days after SPC.<sup>[2]</sup> Rare instances of perforations presenting after 3 months have been reported.<sup>[3]</sup>

The other possible late complication of transperitoneal SPC is predisposition to incisional hernia. Few case reports of hernia in the SPC tract are available<sup>[4]</sup>, but incisional hernia with SPC *in situ* is very rare, with very few case reports<sup>[5]</sup>.

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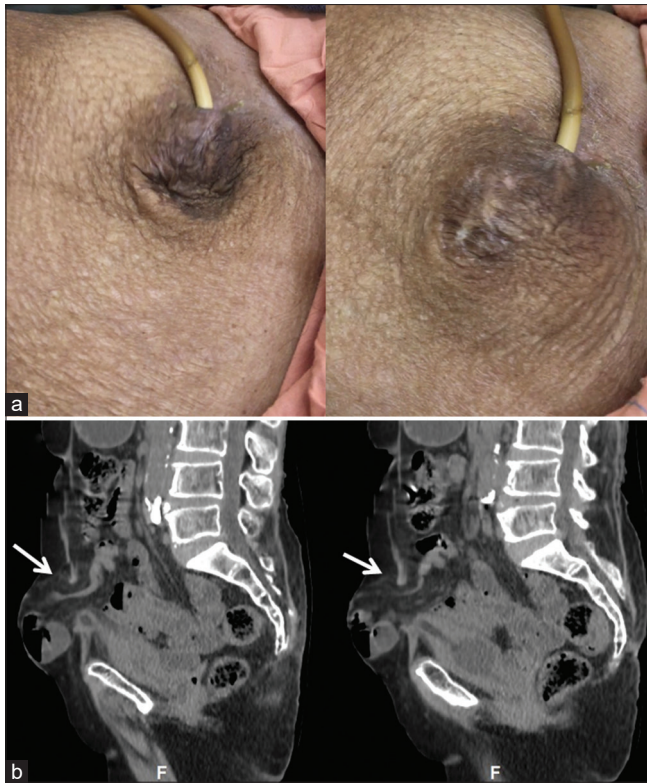
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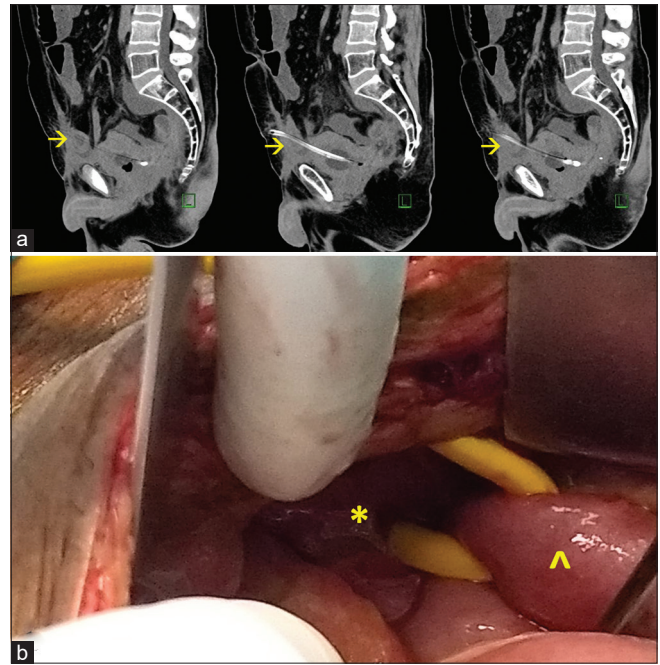
**Figure 1:** (a) Clinical picture of incisional hernia while resting (left image) and during coughing (right image), (b) CT image of incisional hernia (white arrow). CT: Computed tomography

These patients need mesh hernioplasty, especially if the neck is narrow and hernia irreducible.

Such complications can be prevented by placing the SPC tract just two finger breadths from pubis, having a well distended bladder to push the peritoneum superiorly and utilizing ultrasonogram as and when available.

**Declaration of patient consent**

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.



**Figure 2:** (a) CT images with arrow showing bowel loop traversed by the catheter, (b) Intraoperative photograph showing the catheter through the ileum (upward arrow) and bladder (asterisk). The yellow arrow highlights the bowel loop, that is being traversed by the catheter. CT: Computed tomography

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