



Case Report

## Suprapubic Gastrostomy: Report of a Rare Complication of Percutaneous Suprapubic Trocar Cystostomy

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### ABSTRACT

Percutaneous suprapubic trocar cystostomy is a commonly performed surgical procedure for acute urinary retention. It can be associated with a few complications; the most dangerous complication being iatrogenic bowel injury. Literature shows reported cases of small and large bowel injuries. We report our experience of a case of inadvertent placement of suprapubic catheter into a distended stomach. There is only one reported case of this complication.

**Key words:** Percutaneous suprapubic trocar cystostomy, Iatrogenic bowel injury, Suprapubic Gastrostomy

### INTRODUCTION

Percutaneous suprapubic trocar cystostomy is a commonly performed surgical procedure for acute urinary retention. It can be associated with a few complications; the most dangerous complication being iatrogenic bowel injury. Literature shows reported cases of small and large bowel injuries. <sup>[1, 2]</sup> we report our experience of a case of inadvertent placement of suprapubic catheter into a distended stomach. There is only one reported case of this complication. <sup>[3]</sup>

### CASE REPORT

A 38-year-old male presented to our emergency department with chief complaints of inability to pass urine for 24 hours and vague abdominal pain. He was

diagnosed as a case of acute urinary retention on clinical examination. There was no history of any symptoms of bladder outlet obstruction or previous catheterization or urethral instrumentation or urethritis. Catheterization was attempted. After failing twice a percutaneous suprapubic trocar cystostomy was performed. Approximately 1/2L of bilious fluid drained. Patient was ultimately found to be anuric due to dehydration. The suprapubic cystostomy site was correct. Emergency Plain CT scan of abdomen showed a distended stomach, duodenum & tip of catheter was seen in stomach along with inflated balloon (Fig 1). An emergency laparotomy was performed after resuscitation. Stomach & duodenum were found to be distended with the catheter tip along with the balloon in stomach (Fig

2). There was no evidence of any injury on posterior wall of stomach or to any other intra abdominal organ. There was no evidence of any mass lesion or any extrinsic compression on stomach or duodenum. Intra operative endoscopy didn't show any mucosal abnormality & scope could be negotiated from the site of gastric injury to

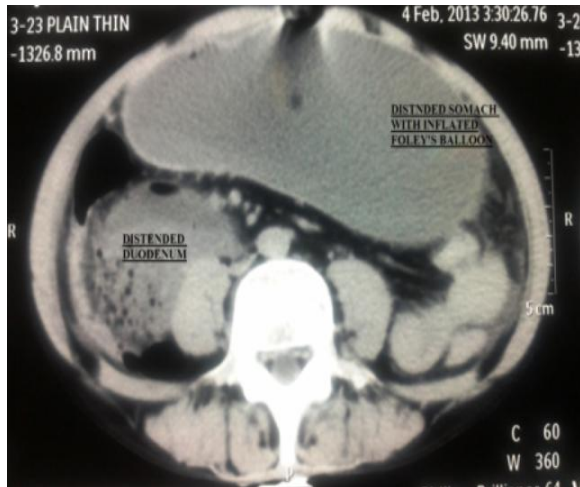


Figure.1 Plain CT scan of abdomen showing distended stomach, duodenum & tip of catheter seen in stomach along with inflated balloon.

## DISCUSSION

Emergency percutaneous suprapubic trocar cystostomy is well known treatment for acute urinary retention due to bladder outlet obstruction. There are a few complications of this procedure, bowel perforation being most disastrous.<sup>1, 2</sup> Literature shows reported cases of small and large bowel injuries. We found only one reported case injury to stomach.<sup>[3]</sup>

Detailed history and clinical examination are extremely important to reduce the complications associated with this procedure. Urinary bladder should be distended before doing percutaneous suprapubic trocar cystostomy. Trendelenburg position also shifts the intraabdominal organs away from the puncture site and thus helps avoiding bowel injury.<sup>[4]</sup>

first 10 cms of jejunum without any difficulty. No obvious cause found for distention of stomach & duodenum. The site of gastric injury was closed primarily & a wide posterior gastojejunostomy was performed. Patient had prolonged hospital stay due to intra abdominal sepsis.

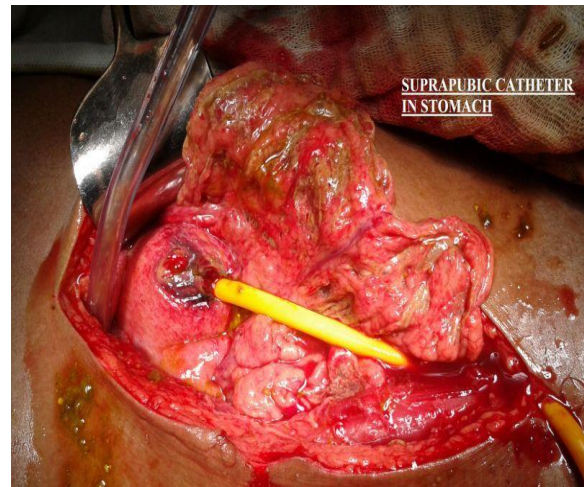


Figure.2 Intra operative photograph showing catheter tip along with the balloon in stomach.

Real-time ultrasound imaging of the bladder for the guidance of a percutaneous suprapubic trocar cystostomy might improve the blind method commonly used.<sup>[5]</sup>

## CONCLUSION

A detailed history and clinical examination could possibly have avoided this complication in our case. Whenever possible an ultrasonography for bladder distention should be done before percutaneous suprapubic trocar cystostomy. This report will make a surgeon aware about the possibility of this rare but potentially life threatening complication.

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