

Unusual iatrogenic complication of urethral catheterization: A rare case report

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Abstract

We report an unusual case of traumatic urethral catheterization. During a routine urethral catheterization of a trauma patient, the untrained care taker accidentally punctured the urinary bladder and overlying small gut. Unaware of the injury caused, the patient was under observation for lower abdominal pain. On recognition of peritonitis patient was immediately operated and the injury repaired. Patient recovered well and was discharged one week later. The report highlights the importance of guidelines for routine urethral catheterization by trained medical personnel.

Keywords

urethral catheterization; complication, perforation; traumatic

Introduction

Urethral catheterization is a common procedure mostly undertaken by junior doctors or nursing staff. This case report aims to highlight the magnitude of complication of male urethral catheterization. Most complications are potentially avoidable and can be prevented by adopting a proper technique of catheterization and proper training on urethral catheterization.

Case Report

A 56 year old man was referred to our hospital in septic shock. Patient had been admitted to a nursing home for fracture of left tibia. After primary management patient had been operated and catheterized postoperatively there. Patient had been passing flatus and stools preoperatively. Patient started complaining of lower abdominal pain after the surgery, gradually his urine output decreased and leucocyte count increased. Patient landed in sepsis. Patient was referred to our hospital on day four. The urine was turbid dirty brown in colour. His urine output was 100ml/24 hrs, with Total leukocyte count of 25000/cumm. After heavy suspicion of perforation peritonitis, X ray abdomen in erect position was done which showed air under the right hemidiaphragm and ultrasound abdomen showed collection in pelvis with dilated small bowel loops. Patient was immediately taken to the operating room and exploratory laparotomy performed, which showed perforation of the urinary bladder and mid ileum.



Figure 1: intraoperative photograph showing perforated dome of intraperitoneal urinary bladder (arrowhead) by silicone urethral catheter and perforated segment of small bowel (arrow)]. Both perforations were repaired and abdomen closed after thorough peritoneal lavage and placement of an abdominal drain. The patient recovered well and was discharged on the seventh postoperative day.

Discussion

Previous published data discuss about chronic inflammatory changes of bladder wall due to indwelling catheter, leading to perforation and fistulization [1-5]. Catheter induced bladder injury is a rare and serious complication and mostly due to chronic indwelling urethral catheter [6]. Traumatic perforation of bladder with sequential traumatic injury of small bowel has never been reported. Various common complications of urethral catheterization reported are urinary tract infection, urethral trauma, bladder stones, bladder cancer, etc [7].

Conclusion

Urethral catheterization should be performed by a trained caretaker, who by experience knows when to abandon the procedure in cases of difficult catheterization. Unexpected complications can jeopardize the relatively safe procedure in the hands of the unwary. This highlights the importance of guidelines for routine urethral catheterization by trained medical personnel.

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