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Rectal perforation as a complication of cystolitholapaxy; a case report

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ABSTRACT

Endoscopic procedures in urology are safe although simple and impossible. We report a rare catastrophic complication of cystolitholapaxy in a patient with severe urethral stenosis. Despite laparotomy one day after cystolitholapaxy because of peritonitis and loop colostomy, the patient died. Hence, the principles of prevention and extra-care and time especially in the abnormal urethra are emphasized.

Implication for health policy/practice/research/medical education:
Eyeless dilatation, especially in the posterior urethra in redo surgeries, is formidable, and insisting on endoscopic operation could yield catastrophic results.

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Introduction

Endoscopic procedures in urology are safe although simple and impossible. Every urologist might be humbled by false route, perforation of the urethra or prostatic capsule or bladder, undermining of the trigone and brisk hemorrhage (1). We report a rare catastrophic complication of cystolitholapaxy in a patient with severe urethral stenosis.A-65-year old man admitted for cystolitholapaxy of 16 mm bladder stone with a history of transurethral resection of the prostate (TURP) 10 years ago. He had severe stenosis in meatus and prostatic urethra. Urethroscopy following dilation of the penile urethra was conducted, guide-wire passed, and then dilation of the prostatic urethra by Bougie was performed. Cystolitholapaxy sheath was passed and bladder stone is broken and extracted. We passed a 14F Foley catheter through guide-wire. Following day, the patient had abdominal pain and generalized abdominal tenderness. Urgent surgical consultation was requested and laparotomy was conducted because of peritonitis diagnosis. The bladder was intact but hematoma revealed in the anterior of the rectum and abdomen was full of pus. Methylene blue dye injection to urethral catheter exposed extravasation from the proximal urethra probably from bulbomembranous urethra. Although a general surgeon performed a colostomy, the patient expired the following day.

Discussion

Urethral perforation and rectal injury have been rarely reported. It seems that this complication is under-reported because of embarrassment and medico-legal repercussions phobia (1).

These injuries may occur in patients with bladder neck contracture especially in bulbomembranous urethra. Forceful instrumentation after symphysis pubis level may be a culprit in urethral and rectal perforation. Fecal contamination of instrument is diagnostic but in our patient, we did not see any fecal staining contradictory to

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previous reports. However urethra-rectal perforation may manifest urosepsis, urinary retention, chronic dysuria, pneumaturia, fecaluria or peritonitis like this case (2). Prevention of this catastrophic complication obliges careful passage of instrument into urethra especially after symphysis pubis (3). It was outlandish that we did not challenge by any resistance during dilation. It seems that in bladder contracture disease urethra is more prone and sensitive to perforation (4). Therefore, direct visual access is mandatory in intricate patients and merely catheterization in the face of apparent fecal contamination is hazardous. In this case, blind dilation with Bougie in the post symphysial level of the posterior urethra might cause urethral and rectal perforation. Arrogance must be abolished and the panic of ensuing medicolegal actions must be set aside in the face of these complications (5). In the cases with the abnormal urethra, extra care and time are obligatory. Prompt diagnosis of the trauma and immediate aggressive surgical management will convince the best ultimate aftermath.

Conclusion

Eyeless dilatation, especially in the posterior urethra in redo surgeries, is formidable, and insisting on endoscopic operation could yield catastrophic results. Therefore, dilation of posterior urethra with Bougie in complicated post-TURP patients should be avoided.

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Authors' contribution

HMR and TZM prepared the primary draft, wrote and edited the manuscript. HMR prepared the final manuscript.

Conflicts of interest

The authors declared no competing interests.

Ethical consideration

Ethical issues including plagiarism, double publication, and redundancy have been completely observed by the authors. Informed consent was taken from the patient for publication of the report.

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