AN UNUSUAL CASE OF ACUTE URINARY RETENTION

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SUMMARY – A 47-year-old male was referred to Emergency Department of our hospital for acute urinary retention. Physical examination showed electrical cable with proximal part introduced into the urethra. Plain abdominal radiograph demonstrated a metallic object in the pelvis and the patient underwent an operation. We used suprapubic cystostomy approach, and the wire was removed from the bladder and urethra.

Key words: Foreign bodies – complications; Foreign bodies – surgery; Foreign bodies – psychology; Urethra – radiography; Urethra – surgery; Case report

Introduction

Acute urinary retention is a common urologic emergency in men. There are several possible causes of acute urinary retention such as α -adrenergic activity, sensory/motor deficit, prostatic inflammation, bladder overdistention, drugs and mechanical obstruction. Here we present an unusual case of acute urinary retention caused by insertion of a foreign body into the genitourinary tract.

Case Report

A 47-year-old male was referred to Emergency Department of our hospital for acute urinary retention in August 2005. The patient reported painful inability to pass urine and denied any other subjective complaints. The patient's past medical and surgical history was not contributory. Physical examination showed some kind of electrical cable with its proximal part introduced into the urethra (Fig. 1). The patient showed no anxiety or attempt to avoid genital or rectal examination.

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Fig. 1. Black electrical cable protruding from the external urethral meatus.

Plain abdominal radiograph demonstrated a foreign metallic object in the pelvis and the patient underwent an operation (Fig. 2). Upon demonstrating the foreign body to have reached the pelvis, we used midline lower abdominal extraperitoneal incision with suprapubic cystostomy approach. After incision on the anterior bladder wall and entering the bladder, we exposed intravesical knotting of a wire object (Fig. 3). We used strong cutting forceps to cut the wire at the level of bladder neck. One part of the wire was removed from the bladder and the other part was gently pulled from the urethra (Fig. 4). Before closing the wound, we inserted urethral catheter (Foley type) and drain through the wound.



Fig. 2. Supine abdominal radiograph showing a metallic object in the pelvis.

The patient was discharged from the hospital on day seven.

Discussion

Cases of foreign bodies in the genitourinary tract are always of interest because they occur with such

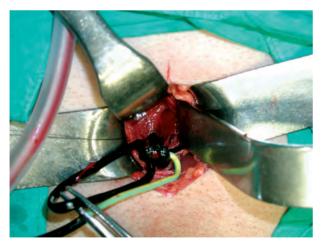


Fig. 3. Intravesical knotting of a wire object (intraoperative view).

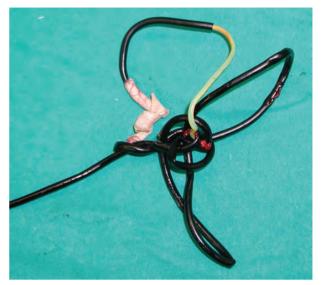


Fig. 4. Wire object knotting (bench-side view).

a frequency that each urologist and practitioner may expect to treat them. Typical circumstances that lead to self-insertion of foreign bodies are exotic impulses, mental illness or borderline personality disorder, sexual curiosity and play during intoxication¹. The variety of foreign bodies inserted or externally applied to the genitourinary tract defies imagination and includes all types of objects. Medical literature contains numerous case reports of strange foreign bodies, such as animals or parts of animals, plants and vegetables, sharp objects, wire-like objects, fluids and powders2. Foreign bodies are typically propelled into the bladder by being pushed further into the urethra in an attempt to remove them3. Travel through the curve of the bulbous urethra without causing significant injuries is surprising and not yet sufficiently explained⁴.

Conclusion

The most suitable method of removing a urethral and bladder foreign body depends on the size and mobility of the object applied to the genitourinary tract. Although the majority of foreign bodies in the bladder may be removed by endoscopy, open surgery may be required for larger, incrusted or solidly impacted objects.

References

- 1. OSCA JM, BROSETA E, SERVER G, *et al.* Unusual foreign bodies in the urethra and bladder. Br J Urol 1991;68:510.
- 2. ALI KHAN S, KAISER CW, DAILEY B, et al. Unusual foreign body in the urethra. Urol Int 1984;39:184.
- ROBERTS PN. Intravesical knotting of a urethral "catheter". Can Med Assoc 1976;115:1199.
- 4. ALIABADI H, CASS AS, GLEICH P, *et al.* Self-inflicted foreign bodies involving lower urinary tract and male genitals. Urology 1985;26:12.

Sažetak

NEUOBIČAJENI SLUČAJ AKUTNOG ZADRŽAVANJA MOKRAĆE

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Muškarac u dobi od 47 godina upućen je na hitni odjel naše bolnice zbog akutnog zadržavanja mokraće. Fizikalnim pregledom otkriven je električni kabel koji je dijelom bio uvučen u uretru. Radiografski pregled trbuha pokazao je metalni predmet u zdjelici, pa je bolesnik podvrgnut operacijskom zahvatu. Primijenili smo pristup suprapubičnom cistostomom i uklonili žicu iz mjehura i uretre.

Ključne riječi: Strana tijela – komplikacije; Strana tijela – kirurgija; Strana tijela – psihologija; Uretra – radiografija; Uretra – kirurgija; Prikaz slučaja