Clinical Case Report

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Rare foreign body in bladder

A case report

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Abstract

Rationale: The bladder is the most common site of foreign bodies in the urinary tract. Presenting complaints in patients with a foreign body are urinary retention, dysuria, frequent urination, decreased urine volume, nocturia, hematuria, painful erection, as well as pain in the urethra and pelvis.

Patient concerns: A 50-year-old married male presented with complaints of severe lower abdominal pain and dysuria.

Diagnoses: A plain radiograph of the pelvis showed a metallic dense foreign body that was composed of many small magnetic balls in the pelvic region.

Interventions: The foreign body was removed under cystoscopy, and 67 magnetic balls were detected without any surgical or postsurgical complications.

Outcomes: During operation, A cystoscopic examination confirmed no residue.

Lessons: The bladder is the most common site of a foreign body in the urinary tract.Most intravesical foreign bodies can be removed transurethrally and with minimum access. The best mode of management depends on the nature of the foreign body, lodged site, expertise of the surgeon, and available instruments.

Keywords: bladder, foreign bodies, urinary bladder diseases

1. Introduction

Foreign bodies are occasionally reported in the bladder.[1] The present case involved 67 magnetic steel balls inside the bladder. A male patient was referred to our hospital and underwent removal of 67 magnetic steel balls from his bladder.

2. Case presentation

A 50-year-old married male presented with complaints of severe lower abdominal pain and dysuria. He stated that he had placed some small steel magnetic balls into the urethra the day before. A physical examination revealed restlessness with mild suprapubic tenderness. No other findings were detected from an abdominal examination. A microscopic urinalysis revealed red blood cells

Figure 1. Plain radiograph of the pelvis showing a dense metallic foreign body that was composed of many small magnetic balls in the pelvic region, of which one part was a cloddy body in the bladder and the other part was a long-striped body in the posterior urethra.

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Declarations

Ethics approval and consent to participate: Obtained.

Consent to publish: Obtained.

Availability of data and materials: Not applicable.

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Figure 2. Extracted foreign body (67 magnetic steel balls).

but no white cells. The complete blood count and electrolyte profile were normal. No abnormalities were detected on a renal function test. A plain radiograph of the pelvis showed a metallic dense foreign body that was composed of many small magnetic balls in the pelvic region, of which one part was a cloddy body in the bladder and the other part was a long-striped body in the posterior urethra (Fig. 1). The foreign body was removed under cystoscopy, and 67 magnetic balls were detected without any surgical or postsurgical complications. A cystoscopic examination confirmed no residue. The diameter of the magnetic balls was 0.5 cm (Fig. 2).

3. Discussion

The bladder is the most common site of a foreign body in the urinary tract. Presenting complaints in patients with a foreign body are urinary retention, dysuria, frequent urination, decreased urine volume, nocturia, hematuria, painful erection, as well as pain in the urethra and pelvis.[1] Intravesical foreign bodies can be self-inflicted, iatrogenic, or migrate from adjacent organs. About 60% of foreign material in the urinary bladder can be transported from a foreign object inserted into the urethra.[2] Urethral self-insertion of a foreign body in adults is usually done for erotic stimulation or by the mentally retarded. Curiosity and inquisitiveness are the main reasons for inserting a foreign body into the urethra in children.[3] Pencils, telephone cables, thermometers, glass rods, toothbrushes, candles, fruit kernels, fish hooks, drinking straw, nails, rifle bullets, chewing gum, snakes, razor blades, wrist watches, and batteries have been reported to have been removed from the urethra and urinary bladder.[4]

In the present case, the patient forcefully inserted 67 magnetic steel balls into his urethra, and most of the balls were transported up to the bladder, whereas others were located in the penile urethra. It was difficult to remove the balls in the urethra using forceps because they were smooth and magnetic. Thus, we pushed all of the balls into the bladder and removed them one by one with a lithotrite via a cystoscope. Most intravesical foreign bodies can be removed transurethrally and with minimum access. The best mode of management depends on the nature of the foreign body, lodged site, expertise of the surgeon, and available instruments.

Author contributions

All authors have made a significant contribution to the findings and methods in the paper and have read and approved the final draft.

Methodology: Xiangdong Chen.
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Writing – review & editing: Shaobo Jiang.

References

[1] Trehan RK, Haroon A, Memon S, et al. Successful removal of a telephone cable, a foreign body through the urethra into the bladder: a case report. J Med Case Rep 2007;1:153.
[2] Singh I. Intravesical Cu-T emigration: an atypical and infrequent cause of vesical calculus. Int Urol Nephrol 2007;39:457–9.
[3] Nazir A, Runyon LC, Chowdhary S. From urethra with shove: Bladder foreign bodies. A case report and review. J Am Geriatr Soc 2006;54:1477–8.
[4] Mukerji G, Rao AR, Hussein A, et al. Self-introduction of foreign body into urinary bladder. J Endourol 2004;18:123–5.