CASE REPORTS

AN UNUSUAL SELF-INFLICTED FOREIGN BODY IN THE URINARY BLADDER AND URETHRA: A CASE REPORT

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Abstract

Introduction: Most foreign bodies in the lower genitourinary tract are self-inserted via the urethra as the result of exotic impulses, psychometric problems, sexual curiosity, or sexual practice while intoxicated. Diagnosis of these foreign bodies can be done by clinical history, physical examination, and image studies of the patient. The treatment of foreign bodies is determined by their size, location, shape, and mobility. In most cases, minimally invasive procedures such as endoscopic removal are recommended to prevent bladder and urethral injuries. In some cases, however, surgical treatment should be done if the foreign bodies cannot be removed by the endoscopic procedure or further injuries are expected as a result of the endoscopic procedures.

Case Presentation: Herein we present a case of self-inserted lower genitourinary foreign body. A 60 years old man presented with complaints of dysuria, dribbling, haematuria and suprapubic pain for 3 weeks. An X-ray of the pelvis showed a coiled up radio opaque shadow of telephone wire in the bladder region extending downwards which was removed by suprapubic cystostomy.

Discussions: Bladder foreign body is not common. Plain radiograph is sufficient to diagnose and minimally invasive procedure is usually successful. In this case retrieval by cystostomy was done to avoid the risk of bladder and urethral injury.

Conclusion: Introduction into the bladder may be through self-insertion, iatrogenic means or migration from adjacent organs. Extraction should be tailored according to the nature of the foreign body and should minimize bladder and urethral trauma. The possibility of an intravesical foreign body should be considered in any patient with chronic unexplained lower urinary tract symptoms.

Keywords: Foreign bodies, Urethra, Urinary bladder.

Introduction:

Foreign bodies in the lower urinary tract are uncommon, but several cases have been reported. It has an important role in the differential diagnosis of lower urinary tract symptoms (LUTSs) [1]. The etiology may include iatrogenic, urethral self-insertion, penetrating trauma, and migration from adjacent organs [1–5]. The most common reason for self introduction is sexual gratification [1]. In some cases psychogenic problem may have an underlying influence. The variety of objects as diverse as electric wire, glass rod, battery, pencil, toys, light bulbs, safety pins, and blue tracks have been reported [6–10]. Some objects are introduced by urologists such as catheters and endoscopic instruments [1]. Patients may present with acute or chronic symptoms due to the nature or the way of introduction of foreign bodies. The common symptoms include frequency, dysuria, haematuria, incontinency, external genitalia swelling, and acute urinary retention (AUR) [1].

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Procedures to remove such foreign bodies completely should be as simple as possible and result in minimal damage to the bladder and urethra [11].

**Case Report**
A 60 years old man, lives in abroad (Kingdom of Saudi Arabia), presented with complaints of dysuria, dribbling, haematuria and suprapubic pain that had lasted for 3 weeks. A physical examination was unremarkable except a wire like foreign body palpated in the root of the penis. Urinalysis showed plenty of pus cells and red blood cells with significant growth of E. coli in the urine culture. An X-ray of the pelvis showed a coiled up radio opaque shadow in the bladder region extending downwards upto anterior urethra. (Figure-1). Upon further interrogation, the patient admitted that he was used to masturbating by introducing a telephone wire through the urethra. Three weeks previous, he had lost the wire inside his erected penis during this process. Under general anesthesia, a five feet long telephone wire was removed suprapubic cystostomy (Figures 2) with an uneventful recovery. A Foley catheter was inserted transurethrally and was kept for 7 days. Patient was discharged home uneventfully on second post operative day.

**Fig.-1:** Pelvic X ray: the intravesical wire is evident. The wire end was extended upto proximal urethra.

**Fig.-2:** The wire was removed by the suprapubic incision.

**Fig.-3:** The removed telephone wire in its entire length.
Discussion

A self-inserted foreign body in the urinary tract is not common. With careful history taking and physical examination, physicians can get information about the type of foreign body and duration of insertion. To determine the exact size, number, and location, radiologic evaluation is necessary [11]. In most cases, pelvic radiographic imaging is sufficient to locate and identify foreign bodies. Abdominopelvic ultrasonography may be of help for the detection of nonradio-opaque materials [12,13]. As would be expected, computed tomography is useful as the next step [14].

Minimally invasive procedures such as endoscopic management to minimize bladder and urethral injuries are usually successful. Where a stone has formed, it should be broken by litholapaxy or intracorporeal lithotripsy together with the removal of the foreign body. In some cases, however, open procedures such as perineal urethrotomy or suprapubic cystostomy without removing the foreign body or dissolution according to the nature of the foreign body are recommended [11,15,16,17].

In our case, because the foreign body was long, curled up and impacted in the bladder wall, so cystoscopic retrieval was not tried. Therefore, a cystolithotomy was done to avoid the risk of bladder and urethral injury.

Foreign bodies in the lower urinary tract can be removed and cured with immediate diagnosis and proper management. However, if foreign bodies remain persistently, complications such as infection, stones, or fistula formation can occur. There have been case reports of patients who died due to sepsis and uremia caused by foreign bodies in the lower urinary tract [18]. Delayed complications such as urethral stricture can occur, so close follow-up is recommended if possible.

Conclusion

Introduction of foreign bodies into the bladder may be through self-insertion, iatrogenic means or migration from adjacent organs. Extraction should be tailored according to the nature of the foreign body and should minimise bladder and urethral trauma. Complete extraction should also be confirmed by panendoscopy at the end of the extraction procedure. The possibility of an intravesical foreign body should be considered in any patient with chronic unexplained lower urinary tract symptoms.

Conflict of Interests: None declared

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**Abbreviations:**
AUR : Acute Urinary Retention
LUTS : Lower Urinary Tract Symptoms