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# An Unusual Self Inflicted Foreign Body in the Urinary Bladder

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#### Authors' contributions

This work was carried out in collaboration between all authors. Author GK wrote the draft of the manuscript. Authors GK and PG managed the literature searches. Authors HLG and PG designed the figures. Authors TCS and KKD contributed to the correction of the final draft. Author TCS provided the case and supervised the work. All authors read and approved the final manuscript.

#### Article Information

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Case Study

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#### ABSTRACT

**Aim:** The objective of this case report is to review the literature regarding various types of foreign bodies in the bladder, their mode of entry and appropriate management.

**Presentation of Case:** We report here the case of a 24 year old adult male with a foreign body in the bladder which was self introduced by him per-urethra for the purpose of sexual gratification.

**Discussion:** Presence of foreign bodies in the urinary bladder is not an uncommon occurrence and various cases highlighting different varieties of foreign bodies have been reported throughout the literature.

**Conclusion:** The foreign body was confirmed to be in the bladder by radiological imaging and removed uneventfully via urethrocystoscopy.

Keywords: Foreign body; urinary bladder; psychiatric evaluation; urethrocystoscopy.

#### **1. INTRODUCTION**

Though an inaccessible site, foreign bodies occur with sufficient frequency in the urinary bladder to render them an important part of urological diseases [1,2]. Usually the foreign bodies in the bladder are self-inflicted, accidental, migratory or iatrogenic [2]. Most patients are too ashamed to admit the self insertion of foreign body and report to hospital only when they have symptoms. The symptoms commonly include pain abdomen, dysuria, haematuria, retention of urine or abscess formation [3]. Each such case is a challenge to the urologist and the treatment has to be individualized based on the nature, size of the foreign body and age of the patient [2]. Most of foreign bodies can be removed the endoscopically, but in some cases suprapubic cystostomy has to be done [3]. Recently some authors have also reported the use of lasers in removal of foreign bodies by fragmentation [4].

#### 2. PRESENTATION OF CASE

A 24 year old male presented to the urology clinic with complaints of lower abdominal pain and dysuria for 2 days. Detailed history revealed that the patient and his male friend used to introduce metallic chain via urethra to masturbate. On one such occasion two days back, the chain slipped into the urethra during the act and the patient immediately developed symptoms. Hematological investigations were normal and routine urine examination revealed the presence of few pus cells. A plain X-ray demonstrated a coiled radio-opaque object in the pelvis (Fig. 1).

Ultrasonographic examination confirmed the presence of a long, coiled foreign body inside the urinary bladder. During urethrocystoscopic examination, mild urethritis was noted with minimal congestion of the bladder wall. A shiny long metallic chain like object was visualized coiled up inside the urinary bladder (Fig. 2).

The foreign body was removed with cystoscopic forceps and patient was discharged next day uneventfully. Patient underwent a psychiatric evaluation on the first follow up visit but no abnormalities were revealed.



Fig. 1. Plain X-ray showing a radio-opaque coiled object in the pelvis

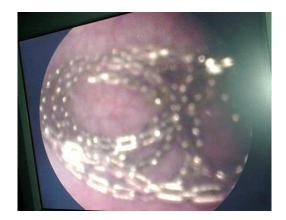


Fig. 2. Cystoscopic view showing a coiled chain like object inside the urinary bladder

#### 3. DISCUSSION

A variety of objects ranging from hairpin, clips, wires, thermometer, bullet, battery charger, leech, fish, Steinmann pin and pencil have been reported in the urinary bladder throughout the literature [3,5,6,7,8,9,10]. Usually the foreign bodies are self inflicted. The self insertion of foreign bodies may be for the purpose of eroticism, inquisitiveness, as a consequence of psychiatric disorders or senility changes and under the influence of alcohol. A marked male pre-ponderance is noted. The most common motive amongst these is sexual gratification and a psychiatric evaluation of all such patients has been recommended [1,10]. Rafique M has reported the presence of mental instability in upto 25% of all such patients [10]. Usually the patients present with lower abdominal symptoms [2]. Any hesitation in examination of genitalia or a vague history should raise suspicion of foreign body and in these cases a detailed history should be sought. Some patients have asymptomatic retained foreign bodies for years together and diagnosis is made only on radiological imaging. In such cases there might be formation of encrustations or calculus with foreign body as the nidus leading to urinary symptoms [1,10]. The complications include abscess formation, bladder fistulae and perforation [11]. In some rare cases squamous cell carcinoma of the bladder has also been described [12]. Management includes palliation of the urinary symptoms by the use of antibiotics, analgesics and anticholinergics [10]. Simultaneously the presence of foreign body must be confirmed radiologically. Usually a plain X-ray will demonstrate a radio-opaque object in the pelvis and Ultrasonography will confirm the foreign body in the bladder. The treatment includes direct visualization of the foreign body endoscopically and its removal. In most of the cases a complete removal is possible cystoscopically. In some cases where either the size of the object is too large and a urethral rupture may occur while attempting cystoscopic removal, or where the foreign body is encrusted and adhered to bladder wall, a suprapubic cystostomy should be performed and the foreign body removed [3]. Post procedure, the complete removal should be confirmed by a plain X-ray and cystoscopic evaluation [2].

### 4. CONCLUSION

Intravesical foreign bodies are not uncommon and must be included in the differential diagnosis of a patient presenting with chronic unexplained lower urinary tract symptoms [2]. Radiological imaging is necessary to confirm the size, nature and number of foreign bodies. Treatment is aimed at complete removal of the object, either endoscopically or through a suprapubic cystostomy. Though some authors have claimed success at fragmenting the foreign bodies using lasers, its use in routine practice is limited [4]. Finally, a psychiatric evaluation of all patients with self inflicted foreign bodies is recommended to prevent recurrence and complications [1,10].

#### CONSENT

All authors declare that 'written informed consent was obtained from the patient for publication of this case report and accompanying images.

#### ETHICAL APPROVAL

All authors hereby declare that preparation and submission of this paper for the purpose of publication has been approved by the ethical committee of the hospital. This paper also conforms to the ethical standards laid down in the 1964 declaration of Helsinki.

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#### **COMPETING INTERESTS**

Authors have declared that no competing interests exist.

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