



## Urinary Bladder a Storeroom: Electric Wire This Time – A Case Report

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### Authors' contributions

This work was carried out in collaboration between all authors. Authors VG and DA designed the study, wrote the protocol, and wrote the first draft of the manuscript. Authors Rahul Jain, SN and Ruchi Jain managed the literature searches, analyses of the study performed the spectroscopy analysis. All authors read and approved the final manuscript.

### Article Information

DOI: 10.9734/BJMMR/2016/29640

#### Editor(s):

(1) Toru Watanabe, Department of Pediatrics, Niigata City General Hospital, Japan.

#### Reviewers:

(1) Manint Usawachintachit, King Chulalongkorn Memorial Hospital, Chulalongkorn University, Bangkok, Thailand.

(2) Chonghe Jiang, Qingyuan peoples Hospital of Guangzhou University, China.

Complete Peer review History: <http://www.sciencedomain.org/review-history/16593>

Case Study

Received 22<sup>nd</sup> September 2016

Accepted 13<sup>th</sup> October 2016

Published 18<sup>th</sup> October 2016

### ABSTRACT

**Aim:** Foreign bodies of lower urinary tract are not uncommon, caused by accidental events, deliberate insertion for auto eroticism or migration from adjacent organs, [1] which is one of the causes of urological emergency. Removal may be as simple as just pulling the foreign body manually or endoscopically to surgical procedures as in this case.

**Presentation of Case:** We present a young male with an electric wire in the urinary bladder inserted via urethral orifice. Failed attempt of cystoscopic removal lead to open surgery.

**Discussion:** Foreign body in the lower urinary tract is most often self inflicted but can be accident or migration from adjacent organs or iatrogenic occurrence. Most of the cases have been associated with self-exploration and for sexual pleasure, the urge to derive some pleasurable sensation is driven by a psychological predisposition for sexual gratification. Or it can be an impulsive behaviour, self punishing in nature and may progress to suicidal tendency.

**Conclusion:** Patients with chronic lower urinary tract infections should be suspected for Urinary tract foreign bodies, which could be removed by the least invasive methods based on the location,

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nature and number of foreign body. Open surgical interventions are reserved for those in whom endoscopic therapy has failed or unsuitable.

*Keywords: Foreign bodies; lower urinary tract; impulsive; cystoscopic removal; urological emergency.*

## 1. INTRODUCTION

Foreign bodies in the urinary bladder and urethra include a wide range of household products like needles, pens, vegetable matters, IUCDs, toothbrushes, tongue cleaners, tampons, pessaries, leeches, toys, and iatrogenic like stents and gauze pieces [2-6]. Self insertion is usually for sexual gratification and auto eroticism during male masturbation. Patients are often psychiatric or drug abusers. They often feel embarrassed to seek medical help and thus delay the illness until the complications arise. Incidence of self inflicted foreign bodies is increasing. Here we present a case of self insertion of electric wire. Complications and management of such patients are being reviewed.

## 2. PRESENTATION OF CASE

A 26 year old unmarried male presented to surgery emergency with history of dribbling of urine and burning micturition for 1 week. Patient was in a well oriented state with clear reasoning and thinking. No history of any mental or emotional disturbance. On repeated enquiry he admitted the self insertion of an electric wire of about 1 feet transurethrally which he told as accidental insertion but refused for any sexual gratification. No history of any previous such attempts. Physical examination was normal, no distension of bladder or any perineal injury. X-ray of the KUB region showed a-coiled wire in the urinary bladder. Cystoscopic removing was attempted and noticed one end of the wire in the posterior urethra, which could not be pulled out by the instrument due to the coiling and knotting of the wire in the bladder. In view of the possible iatrogenic injury to the urethra, the cystoscopic procedure was abandoned and the wire was pushed back into the bladder.

Patient was planned for open surgery. A small suprapubic cystotomy was done and the entangled electric wire removed in toto. Bladder was closed in two layers with a Foleys catheter in situ. Catheter was removed after 1 week. A psychiatric consultation of the patient was done. Patient followed up for 2 months after operation and was doing well.



**Fig. 1. X-ray showing intravesical electric wire**



**Fig. 2. Electric wire removed from bladder**

## 3. DISCUSSION

Foreign bodies of the lower urinary tract can be anything from the household articles like needles, pens, pencils, safety pins, wires, batteries, telephone cables, rubber tubes, straws, strings, thermometers, vegetable matters like carrot, cucumber, beans, bamboo sticks, grass

leaves, IUCDs, toothbrushes, tongue cleaners, tampons, pessaries, leeches, toys, and iatrogenic elements like stents and gauze pieces [2-7]. Most often self inflicted for sexual gratification, psychosis or because of compulsivity and self injury but can be accidental or migration from adjacent organs [5,6]. Patients are often psychotic, confused or under influence of alcohol, feel ashamed to come to hospital unless there are some complications. Presenting features may be acute urethritis or cystitis, edema of the external genitalia, obstructive symptoms and urinary retention. A long time untreated foreign body can lead to recurrent UTIs, encrustations, genitourinary fistulas, obstructive uropathy and even squamous cell carcinomas [8,9]. Female foreign bodies may be due to the attempts of abortion by untrained persons.

Psychoanalytical theories postulated for self infliction are Kenny's theory: that after an initiating event of accidentally discovered pleasurable stimulation of urethra will be followed by repetition of the same action using different objects of unknown danger. The urge to derive the same pleasurable sensation is driven by a psychological predisposition for sexual gratification [10].

Wise's theory: urethral manipulation is a paraphilia combining sadomasochistic and fetishist elements, where the orgasm of a particular individual depends on the presence of a fetish. He theorizes that it could result in an regression to urethral stage of erotism, due to a traumatic event or a libidinal drive [11]. In some cases, it could be an impulsive behaviour, self punishing in nature and may progress to suicidal tendency [12].

Diagnosis is usually made with the history and physical examination along with radiological investigations like X-ray and ultra sound which help in identifying the number, nature and location of the foreign body along with the complications and in planning intervention.

Management aims in removing the foreign body en toto either endoscopically or surgically [13,14]. For the foreign bodies smaller than urethral diameter endoscopic removal done with graspers. Objects larger than urethral diameter are removed by pushing into the bladder and then removed with piece meal or by open operation suprapubically. Impacted foreign bodies may need meatotomy or urethrotomy.

Urethral and bladder injuries should be avoided while attempting removal. Laparoscopic removal also reported in literature with no complications [15].

Post operative antibiotics were advised and psychiatric consultation obtained in which he was found to have impulsive disorder. He was told that this specific entity of foreign body insertion via natural orifice was polyembolokoilamania.

#### **4. CONCLUSION**

Patients with chronic lower urinary tract infections should be suspected for Urinary tract foreign bodies, which could be removed by the least invasive methods based on the location, nature and number of foreign body. Open surgical interventions are reserved for those in whom endoscopic therapy is failed or unsuitable.

#### **CONSENT**

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

#### **ETHICAL APPROVAL**

All authors hereby declare that all experiments have been examined and approved by the appropriate ethics committee and have therefore been performed in accordance with the ethical standards laid down in the 1964 Declaration of Helsinki."

#### **COMPETING INTERESTS**

Authors have declared that no competing interests exist.

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