

CASE REPORT

A Twisted Tale of a Transurethrally Inserted Foreign Body

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A transurethrally-inserted foreign body is a rare urologic case that may be brought about by deviant sexual behavior or mental disability. This is a case of a 42-year old male presenting with repeated episodes of inserting a twisted electrical wire into his urethra. He already underwent open transvesical extraction of intravesical screw two years prior. A pre-operative pelvic x-ray confirmed the length of the intravesical component of the electrical wire. Open transvesical extraction of the wire was done followed by urethroscopy to ensure the absence of a urethral injury. An open approach was chosen over an endoscopic one because of the significant intravesical component of the foreign body. The patient did not experience any post-operative complications such as fever and superficial wound infections. He was referred to psychiatry service cleared for any deviant behavioral or psychiatric conditions.

Keywords: Intravesical foreign body; transurethrally inserted foreign body; open cystotomy

Introduction

A transurethrally-inserted foreign body is a rare urologic event. Even more rare is a repeated placement of an intravesical foreign body. In most cases, foreign bodies inserted into the urethra are small and can be easily removed endoscopically. However, foreign bodies that become calcified and of those that have significant intravesical component, will need a more invasive approach. Below is a case of a patient who underwent open cystotomy for removal of transurethrally-inserted foreign body in an interval of two years.

The Case

A 42-year old male came to our emergency room due to his inability to pull out a wire which

he purposely inserted into his urethra. He claimed to have been experiencing a one-week history of fullness in the urethra which he tried to relieve by repeatedly inserting an insulated, copper electrical wire into his urethra (Figure 1). Despite the presence of the wire, he was still able to void freely. He was cooperative and euthymic during examination. A pelvic x-ray was requested to determine the length and configuration of the foreign body that was within the pelvic cavity (Figure 1).

He was immediately prepared for an emergency open cystotomy with extraction of the foreign body. In a lithotomy position, 5 cm vertical suprapubic incision was made over the scar of the previous surgery. This was carried down to the space of Retzius. A transverse incision was made on the anterior wall of the urinary bladder. The foreign body was extracted proximally through the cystotomy incision (Figure 1A). The wire measured

30 cm in length. The bladder incision was closed in layers using absorbable suture. Urethroscopy was also done to assess the urethra. No urethral mucosal injury was detected (Figure 2A). A urethral Fr 18 two-way catheter was inserted. A penrose drain was placed and the abdominal wound was closed in layers. The penrose drain was removed on the fifth post-operative day while the urethral catheter was removed one week after surgery. He was able to void freely after catheter removal. During admission, the patient was referred to psychiatry service and was cleared from any psychiatric condition or odd sexual arousal behavior.

Two years prior to this admission, the patient sought consult in the same institution due to painful urination and gross hematuria. Work-up showed pyuria and bacteriuria and a urinary bladder ultrasound showed an intravesical foreign body shaped like a screw. At that time, the patient denied purposely inserting the foreign object into his urethra. The initial plan was to extract the screw transurethraly. However, on cystoscopy, the screw was encrusted and was regarded unsafe for transurethral extraction. It was thus extracted using a suprapubic incision followed by a cystotomy. The patient was lost to follow-up post-operatively until this second incident.

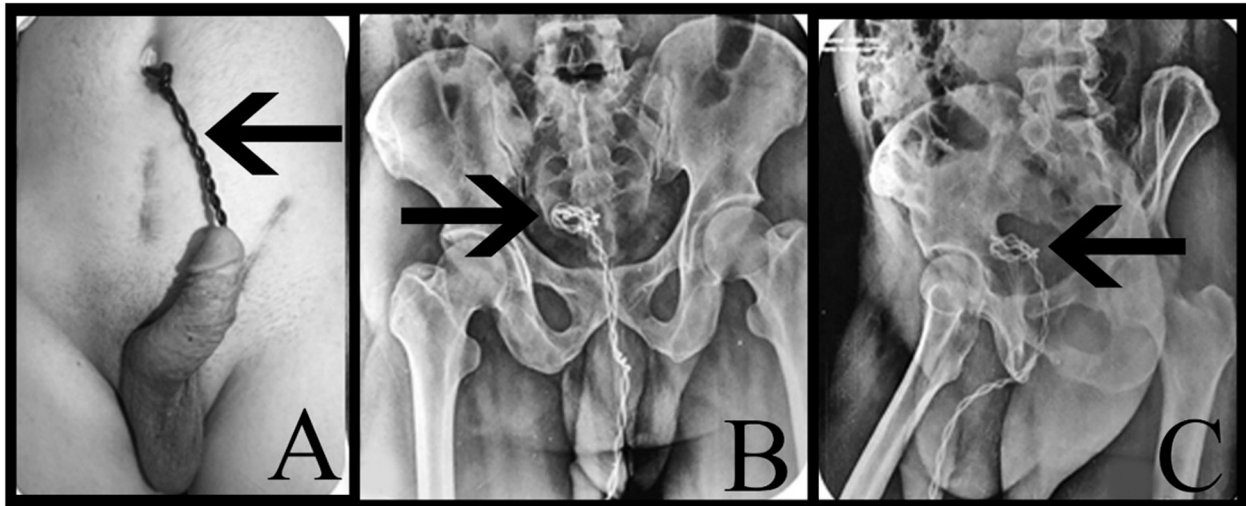


Figure 1. (A) Gross appearance of the distal part of the wire; (B) pelvic x-ray P-A view; (C) pelvic x-ray oblique view. Arrows are pointing to the foreign body.

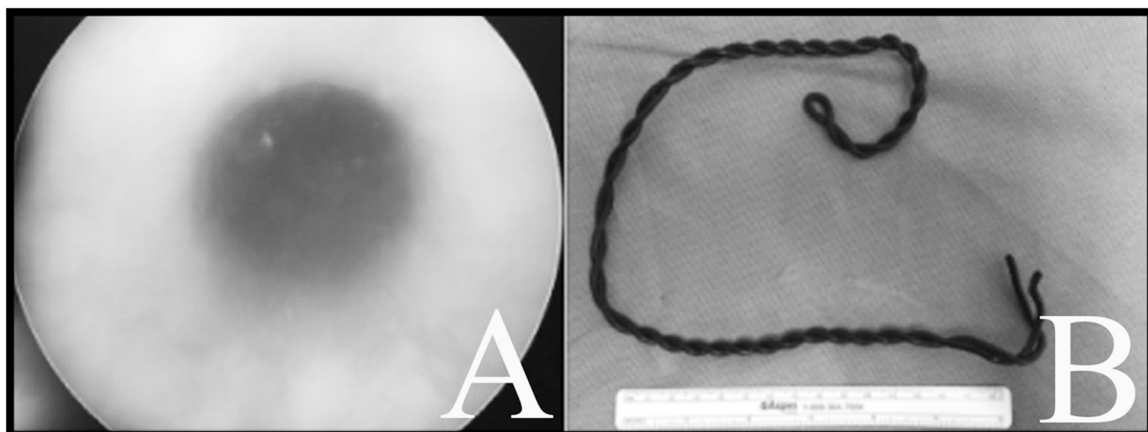


Figure 2. (A) appearance of the urethral mucosa on urethroscopy; (B) appearance of the wire after extraction.

Discussion

One of the oldest reported cases of a person inserting a foreign body into his bladder was described by de Tarnowsky in 1914. The author reported a 36-year-old male patient who inserted long, thinly-rolled sheaths of solid tar into his urethra. Management comprised of bi-weekly irrigation of silver nitrate, boric acid or potassium permanganate solutions. After four months, the patient underwent suprapubic cystotomy wherein a mushroom-like solid mass was extracted. Surgery was successful and the patient was able to void per urethra.

In 2000, van Ophoven described patients who placed different objects through the urethra. Such objects included animals or parts of animals (a leech and animal bones), plants and vegetables (slippery elm, grass and cucumber), sharp and lacerating objects (pencil, pin and needle), wire-like objects (cable, catheter and rubber tube), and fluids and powders (glue and cocaine). According to the authors, typical circumstances that lead to self-insertion of foreign bodies include exotic impulses,

mental illness or borderline personality disorders, sexual curiosity and play during intoxication. The most common motive associated with insertion of foreign bodies into the genitourinary tract is sexual or erotic in nature. For transurethraly-placed foreign bodies, the main motivating factor is urethral masturbation, which involves the introduction of objects on multiple occasions into the urethral opening for sexual gratification. In a study done in India, six out of eight patients who presented with transurethral foreign bodies admitted to achieving sexual gratification from the act.

The most common reason for emergency consultation is when a foreign body gets stuck. Otherwise, a foreign body in the bladder can cause lower abdominal pain, gross hematuria, bladder irritation and urinary tract infection.

In their retrospective study of 27 patients presenting with urethral foreign bodies, described an algorithm that can be used in the management of urethral foreign bodies. This algorithm can be applied for cases of urethral foreign bodies with or without urinary bladder components (Figure 3). The manner in which we managed our patient is in

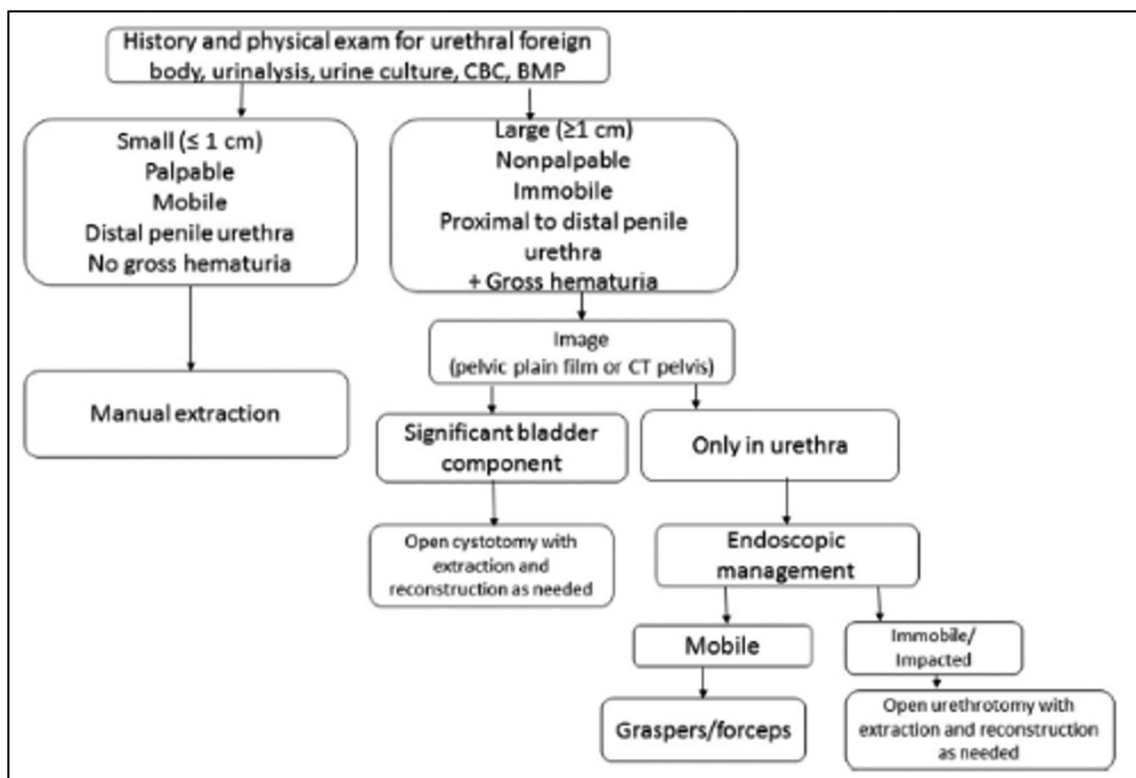


Figure 3. Algorithm for management of transurethral foreign body insertion.

accordance with the recommendation found in this algorithm. The main reason the authors decided to perform an open cystotomy was because of the significant length of wire located intravesically. The most common post-operative complications following cystotomy for extraction of a foreign body have been reported to be fever and superficial surgical wound infections. Fortunately, this particular patient did not present with any adverse events after the procedure.

References

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