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Psychiatric Fantasies and Urological Realities: A Singular Case of Self-Inserted Intra-Urethral Foreign Body

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Abstract **Case Report**

This case report describes a rare urological emergency involving a 26-year-old schizophrenic patient who presented with acute urinary retention and bleeding after self-inserting a 65 cm metal cable into his urethra. Following sedation, a bladder ultrasound confirmed urinary retention but no foreign bodies in the bladder. Manual removal attempts were unsuccessful, and the patient was taken to the operating room without further imaging. Surgical removal was achieved by making an incision and opening the spongy body to extract the cable. Prophylactic antibiotics were administered, and the urethra was closed over a silicone catheter. Despite recommendations for longer catheter retention, the patient's psychiatric condition required early removal. Postoperative recovery was uneventful, with good outcomes at six months and one year, as confirmed by flexible endoscope evaluations. The patient was referred to psychiatric services for ongoing care. This case highlights the necessity of a multidisciplinary approach in managing urological emergencies, especially when complicated by psychiatric disorders.

Keywords: urological emergency, urethra, urinary retention, Prophylactic antibiotics.

CASE REPORT

Intra-urethral foreign bodies are a rare urological emergency, particularly when occurring in the context of sexual fantasies, psychiatric disorders or both. These can include metal cables, pens, screws, nuts, urinary catheters, or any solid object that can fit the task [1-3]. Management should be multidisciplinary, involving infectious disease specialists, surgeons, psychiatrists, and psychologists.

Where possible, and after stabilizing the patient psychiatrically, radiological exploration is desirable on a case-by-case basis to establish a lesion assessment of the urethra, corpora cavernosa, bladder, and even the anatomical structures of the pelvic region [4]. Foreign body removal can be performed under local or general anesthesia by traction with a sturdy clamp; in certain cases, urethral surgery is considered [3, 5-7].

We present the case of a 26-year-old patient, poorly managed schizophrenic with heightened persecution delusions, chronic tobacco use associated with cannabis, who presented to the surgical emergency department with acute urinary retention and urethrorrhagia following the insertion of an electric metal cable measuring 65 cm and 4 mm in diameter of unknown origin in a state of agitation.

After the patient was reassured and calmed, interrogation revealed that the cable had been folded in half and self-inserted into the urethra by the subject himself in the context of a sexual fantasy. In search of extreme satisfaction, the cable was forcibly inserted after encountering resistance at the spongy-cavernous bulb, resulting in the creation of a loop inside the urethra preventing its removal by the patient himself.

A blood and infectious workup was requested, and we performed a bladder ultrasound revealing urinary retention with sediment appearance related to the presence of blood in the bladder (Figure 1); furthermore, there were no foreign bodies in the bladder or prostatic urethra. Sedation was performed for the placement of a suprapubic catheter (Figure 2), which returned slightly bloody urine. The rectal examination was unremarkable, confirming that the cable had not reached the prostatic urethra. Palpation of the perineum and urethra revealed a hard mass in the shape of a loop at the level of the anterior urethra. An attempted soft manual removal of the foreign body was unsuccessful.

Under these conditions, we did not resort to another imaging modality as clinical examination and ultrasound were largely sufficient to establish a precise lesion assessment.

Due to the urgent nature of the patient's admission to the operating room, an X-ray was not performed before surgery. Instead, a urethroscopy was planned but could not be executed because the meatus was completely blocked by the wire. Despite these circumstances, palpation of the penis combined with a digital rectal examination (DRE) proved sufficient to determine the location of the knot and the extent of the wire in the posterior urethra. While a urethrogram is not recommended due to the high risk of infection, the threshold for performing retrograde urethrography (RUG) should be low in patients presenting with blood at the meatus, according to Patel *et al*., [8].

Endoscopic exploration of the urethra was not possible for two reasons: first, the urethral meatus was occluded, preventing the admission of a flexible or rigid cystoscope, and second, due to fear of exacerbating urethral injury.

The decision was made to admit the patient to the operating room for surgical removal. Prophylactic antibiotic treatment with 2g of cefazolin and tetanus serum was administered. The patient was placed in the dorsal position (Figure 3), a tourniquet was placed at the base of the penis, an incision on the median raphe was made, and an opening of the spongy body was performed (Figure 4); thus, cable removal was achieved without difficulty (Figure 5). Bipolar current was used for hemostasis (Figure 6), followed by closure of the urethra over a size 18 French silicone catheter (Figure 7). According to the EAU recommendations, the urethral drain should be soft and of small caliber ranging from 14 to 18 Fr [6, 7].

The cable was sent for bacteriological study, which revealed Staphylococcus aureus.

Postoperative recovery was uneventful; antibiotic therapy was switched to amoxicillin with clavulanic acid for ten days, and the suprapubic catheter was removed on Day 2 and the urinary catheter on Day fifteen.

The suprapubic catheter could have been kept longer. According to The Campbell-Walsh urology 11th edition [6], the voiding trial should be undergone between 21 and 28 days post operatively and only after a successful voiding trial the suprapubic catheter must be removed.

In our case, the patient was schizophrenic in the acute phase, agitated and could not tolerate the suprapubic catheter, motivating the decision to remove it as soon as possible even though the recommendations are not in favor.

The patient was referred to a psychiatric department for further management.

The outcomes, which were good, were evaluated at 6 months and one year after treatment using a flexible endoscope, as urethrogram and uroflow are not indicated for surveillance after urethral surgery [6].

Figure 1: The image show a distended bladder with a smooth, rounded wall. The thickness of the bladder wall is decreased due to retention. A small amount of sediments because of blood present in the bladder

Figure 2: The image depicts the patient post-placement of a suprapubic catheter, affixed with a balloon filled with 10cc of sterilized water. Additionally, blood is visible on the patient, indicative of urethrorrhagia

Figure 3: The patient is positioned supine on the operating table, with the cable having been severed to enhance antiseptic measures

Figure 4: The spongy body is incised to access the urethra, and the edges of the incision are stabilized with stay sutures

Figure 5: The cable was lodged inside the urethral lumen, requiring maneuvers to deliver the semi-rigid cable. This is how it appeared within the urethra

Figure 6: Hemostasis achieved with bipolar electrosurgical circuit. Although bleeding was not abundant, we took precautions to secure against potential future bleeding

Figure 7: The closure of the incision after the placement of an 18 French silicone Foley catheter

DISCUSSION

Intraurethral foreign bodies are a rare traumatic condition often associated with psychiatric cases that are not or poorly monitored. The objects used can be multiple, soft, rigid or semi-rigid [1-3]. These lesions can affect the bladder or even the adjacent organs in both men and women, but the most serious, such as vascular trauma, can be life-threatening [4].

Rapid radiological exploration is essential to assess secondary damage and plan appropriate management.

Intervention by the urological surgeon is essential, and may involve other medical and surgical specialties.

Conservative treatment involves removal of the foreign body using forceps under local or general anesthesia [3]. Endourological exploration may be necessary if an object is inserted completely into the urethra.

As a last resort, urethral surgery is the ultimate curative treatment, but must be performed by an experienced surgeon to avoid the risk of stenosis [2, 3, 5].

LEARNING POINTS

- Adequate training of emergency medical personnel is necessary for the management of such patients due to the frequent occurrence of psychotic conditions.
- Antitetanus antibiotic prophylaxis should never be omitted.
- Informing the patient about the risk of infection and stenosis is necessary to limit future damage to the rest of the genitourinary system.

Conflict of Interest: None

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