CASE REPORT

ELECTRICAL WIRE AS A FOREIGN BODY IN A MALE URETHRA: A CASE REPORT

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Abstract

Self-inflicted foreign bodies in the male urethra and urinary bladder are an emergency that urologists may rarely have to face. A case of an electrical wire inserted in the male urethra and coiled in the bladder is presented here. A 33-year-old male presented with the inability to void and bloody urethral discharge after having introduced a long electrical wire in his urethra for masturbation 6 hours earlier. He had made several unsuccessful attempts to remove it. We know that variety of these objects may be impressive and removal of the foreign body may be quite challenging requiring imagination and high-level surgical skills. In this case an electrical wire was used and the diagnostic as well as the therapeutic steps for its removal are presented here.

Introduction

Self-insertion of foreign bodies into the male urethra and urinary bladder for autoerotic stimulation is rather a rare emergency condition that an urologist may encounter. A case of an electrical wire inserted in the male urethra and coiled in the bladder is presented.

Case presentation

A 33 year old male presented with the inability to void and bleeding per urethra after having introduced an electrical wire into his urethra for masturbation 6 hours earlier. He had made several unsuccessful attempts to remove it.

During the physical examination, the end of the wire was observed in the urethral meatus . An x-ray of kidney, ureter, bladder (KUB) demonstrated a long coiled up radiopaque wire inside the bladder. The wire had multiple knots in urethra & urinary bladder. The patient was married with a child and his wife accompanied him. His socioeconomic status was of middle class. It was the first time he had ever introducted a foreign body in his urethra and he had no history of psychiatric illness or drug addiction. After giving his formal consent, the patient was taken to the operating room. Under spinal anesthesia an unsuccessful trial was made to pull out the wire as the wire had multiple knots . An attempt was made to insert a 19Fr cystoscope or an 8Fr ureteroscope parallel to the wire but this was impossible due to lack of space. As there were multiple knots in the wire in urethra, a ventral urethrotomy was performed and the wire was removed. Urethrotomy wound was repaired with 5-0 vicryl. A urethral catheter was passed. The patient was discharged on the third postoperative day and the urethral catheter was removed on the 14th postoperative day. He was on intravenous antibiotics for three days and on oral antibiotic regimen for another week. On the six month evaluation, the patient is well with a normal uroflow and no symptoms of urethral stricture.

Fig- 1: *End of the wire outside the urethral meatus.*

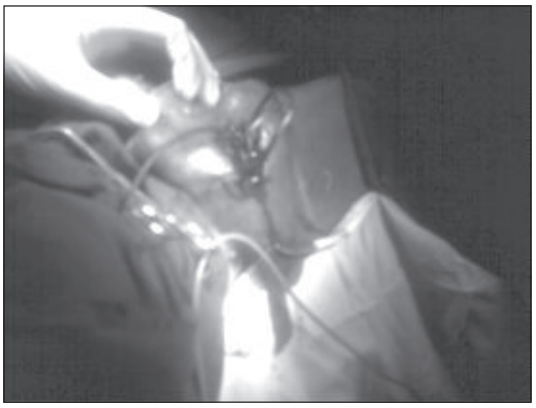

Fig- 2: *Intra-operative view through a urethrotomy.*

Fig- 3: *Wire after removal*

Fig- 3: *Electric Wire in X-ray Film*

Discussion

A large number of self-inflicted foreign bodies have been reported in the male urethra and urinary bladder[1-5]. The variety of these objects is really impressive, including sharp and lacerating objects (e.g needle, pencil, wire), wire-like objects (cable, rubber tube), parts of animals (bones) or plants and vegetables (hay, cucumber), fluids (e.g, glue) and powders (e.g, cocaine)[1].

The most common reason for self-insertion of a foreign body into the male urethra is of erotic or sexual nature, especially masturbation or sexual gratification[1-4]. A mental illness or drug intoxication may also be the reason[1,2]. Masturbation in males is very frequent with a rate close to 100%[6]. In the majority of cases, the patient feels guilty and humiliated[1,2], therefore he postpones the search for medical help. In our case, the patient was expressing repentance for his action. A few very interesting psychiatric-psychoanalytic theories have been postulated. According to Kenney's theory, the initiating event is the coincidentally discovered pleasurable stimulation of the urethra, followed by repetition of this action with objects of unknown danger, driven by a particular psychological predisposition to sexual gratification[1,7]. Wise considered urethral manipulation as a paraphilia combining sadomasochistic and fetishistic elements where the orgasm of the individual depends on the presence of the fetish. He believed it shows a regression to a urethral stage of erotism due to a traumatic event or a strong libidinal drive[1,8]. From the clinical view, many authors advocate the psychiatric evaluation of these patients, based on theories that consider this act as an indication of an impulsive behavior, self-punishing in nature that may aggravate to suicide [1]. The psychiatric evaluation is controversial as many of these patients are psychologically normal[2]. In our case, psychiatric evaluation was performed by a psychiatrist revealing no signs of depression or impulsive behavior.

Clinical presentation may vary from asymptomatic to swelling of external genitalia, dysuria, poor urinary stream or retention, bloody or purulent urethral discharge and ascending urinary tract infection[1,2].

Depending on the type of foreign body and its location, various methods of removal have been described, including meatotomy, cystoscopy, internal or external urethrotomy, suprapubic cystostomy, Fogarty catheterization, and injection of solvents. Removal of the foreign body may be quite challenging requiring imagination and high-level surgical skills. Endoscopic therapy is the standard. The most suitable method is relevant to the size and mobility of the object. In the majority of mobile objects inside the urethra, the mobility is towards the bladder where, after having been pushed, the foreign body can be grasped by forceps or retrieval baskets. Nephroscopes have been used for the retrieval of screws as well as magnetic retrievers for galvanic objects[1]. The YAG laser has also been used lately[5]. In cases where endoscopic procedures are unsuccessful, then open surgery is recommended. For objects stuck in the penile urethra, external urethrotomy is recommended[9], while for intravesical foreign bodies, a suprapubic cystostomy is the treatment of choice. In our case external urethrotomy was performed as the wire had multiple knots located in the urethra.

Conclusion

A self-inflicted foreign body in the urethra and bladder is a rare situation. Endoscopic manipulation is the preferred first-line treatment and if unsuccessful, open procedures may be necessary.

References

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