# **Urethral Foreign Body Causing Urethral Fistula**

Onkar Singh, <sup>1</sup> Shilpi Singh Gupta<sup>2</sup>

Department of Urology, **Bhopal Memorial Hos**pital & Research Center. Madhya Pradesh, Bhopal, 462038, India <sup>2</sup> Department of Surgery, Gandhi Medical College & Hospital, Bhopal, Madhya Pradesh, India

## due to a UFB is a rare reporting. (1,2)

**CASE REPORT** 

INTRODUCTION

A 38-year-old man presented with urine leak from an opening in the perineum near the base of the scrotum every time he voids. Local examination revealed a urethrocutaneous fistula in the perineum through which an end of a gold chain was seen coming out.

variety of urethral foreign bodies (UFBs) have been reported in the lit-

erature; however, it is a rare clinical finding. (1-6) Most of the UFBs tend

to be self-inserted because of sexual or erotic reasons. (2) Presentation is

usually with dysuria, poor urinary stream, swelling of external genitalia, urethral

discharge, or urinary tract infection. Late presentation may be with complications,

such as hematuria, periurethral abscess, vesical calculi, urethral calculi, stricture or diverticulum, incontinence, or erectile dysfunction. Urethral fistula development

On careful history taking, the patient admitted self-insertion of gold chain while masturbating 18 months earlier. But when he tried to remove the chain, it got stuck in; hence, he left it there for some days. Thereafter, he cut the segment of the chain that was lying outside through the urethral meatus, and thus the chain was lost in the urethra. He had intermittent burning micturition and only mild discomfort since then. He did not seek any medical advice. About one month back, he noticed an opening in the perineum and urine leakage through it while voiding. A 2-cm segment of the gold chain came out through it, but when the patient tried to remove

Corresponding Author:

Onkar Singh, MBBS, MS VPO, Sangowal, Tehsil, Nakodar, Distt, Jalandhar, 144041, Punjab, India

> Tel: +91 989 377 7321 E-mail: dronkarsingh@ gmail.com

Received December 2009 Accepted January 2010



A segment of a gold chain coming out through a urethral fistula in the perineum

the chain by pulling it out, it got stuck again with a small segment hanging out through the perineal opening (Figure).

Plain radiography showed that the distal end of the chain was lying in the penile urethra about 4 cm from the urethral meatus. It was the proximal end of the chain, which had come out through urethroperineal fistula.

Chain could not be removed by gentle traction on its visible proximal end. Cystoscopy was done under local anesthesia and damaged distal end of the gold chain was seen in the penile urethra. Chain was easily removed by holding it with a forceps. A Foley catheter was placed in situ. He was given oral antibiotics.

Fistula healed in 15 days, but the catheter was kept for few more days and removed on the 21<sup>st</sup> day. He voided well and was discharged from the hospital. At 6 months follow-up, he had normal urine flow without obstructive symptoms.

#### DISCUSSION

Urethral foreign bodies include objects of various types, shapes, and sizes, and thus pose a challenge to the urosurgeons. (1-6) These are usually self-inserted and the most common motive associated

with the insertion of foreign bodies into the genitourinary tract is a sexual or erotic reason in nature. (2) In adults, this is commonly caused by the insertion of objects used for masturbation and is frequently associated with mental health disorders. (3)

Reporting their experience with self-inserted urethral foreign bodies in 17 men, Rahman and colleagues found that the most important cause was psychiatric disorder, followed by intoxication and erotic stimulation. The most frequent symptom was frequency with dysuria. Diagnosis was made by plain radiography in 14 patients while 3 needed computed tomography scan. Sixteen were treated successfully by endoscopic retrieval.(1) In an excellent review of published literature between 1755 and 1999, van Ophoven and deKernion found that sexual or erotic cause had been the most common etiology, and recommended that whenever possible, endoscopic techniques of retrieval should be used; however, surgical retrieval may be required if severe inflammation is present. They also concluded that the most suitable method of removing a UFB depends on the size and mobility of the obiect.(2)

The most frequent complications of UFB are urethritis, urethral tear with periurethral abscess and/ or fistula, and hemorrhage.<sup>(1,7)</sup>

Urethral fistula secondary to UFB, as occurred in the present case, has been rarely reported. It may occur as a result of rupture of an already existing periurethral abscess. (7) Majority of the patients with UFB, like ours, are ashamed to admit self-insertion and the history is often difficult to obtain. Unexplained urethral fistula and/or scrotal abscess should point towards the possibility of UFB. (7)

Once a UFB is suspected or palpated externally, evaluation should be done to know the exact size, location, and number of foreign bodies. (1) Plain x-ray or ultrasonography usually provide sufficient information required to plan the intervention; computed tomography scan is being needed rarely. (2,8) Most UFBs often require urgent interventions. The

aim is to remove the UFB with minimal trauma to the urethra and avoid compromise of erectile function. The most effective technique to remove or retrieve a UFB depends on the size, type, location, and mobility of UFB. (1,2,4) Various methods of removal described in the literature include meatotomy, cystoscopy, internal or external urethrotomy, suprapubic cystotomy, Fogarty catheterization, and injection of solvents. (1,2,4) Endoscopic removal of these foreign bodies is often considered the treatment of choice that may require a grasper, stone retrieval baskets, snares, or some modified instruments (1,4)

A urethral fistula secondary to a UFB can also be managed by endoscopic removal of the UFB, along with drainage of periurethral abscess if present, control of infection with appropriate antibiotics, and Foley catheterization while allowing the fistula to heal spontaneously. In difficult or non-healing cases, fistulectomy and suprapubic cystostomy become necessary.<sup>(7)</sup> Needless to say that the patient should be referred for psychiatric evaluation. (5) Our patient was treated by urethroscopic extraction of the gold chain followed by Foley catheterization for 21 days, and antibiotics. We referred the patient for psychiatric evaluation, but he refused.

### **CONFLICT OF INTEREST**

None declared.

#### REFERENCES

- Rahman NU, Elliott SP, McAninch JW. Self-inflicted male urethral foreign body insertion: endoscopic management and complications. BJU Int. 2004;94:1051-3.
- van Ophoven A, deKernion JB. Clinical management of foreign bodies of the genitourinary tract. J Urol. 2000;164:274-
- Garcia Riestra V, Vareal Salgado M, Fernandez Garcia L. [Urethral foreign bodies. Apropos 2 cases]. Arch Esp Urol. 1999;52:74-6.

- Gonzalgo ML, Chan DY. Endoscopic basket extraction of a urethral foreign body. Urology. 2003;62:352.
- Costa G, Di Tonno F, Capodieci S, Laurini L, Casagrande R, Lavelli D. Self-introduction of foreign bodies into the urethra: a multidisciplinary problem. Int Urol Nephrol. 1993:25:77-81.
- Osca JM, Broseta E, Server G, Ruiz JL, Gallego J, Jimenez-Cruz JF. Unusual foreign bodies in the urethra and bladder. Br J Urol. 1991;68:510-2.
- Ali Khan S, Kaiser CW, Dailey B, Krane R. Unusual foreign body in the urethra. Urol Int. 1984;39:184-6.
- Barzilai M, Cohen I, Stein A. Sonographic detection of a foreign body in the urethra and urinary bladder. Urol Int. 2000;64:178-80.