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An Unusual Foreign Body in the Bladder and Percutaneous Removal

YOUNESI M[1], AHMADNIA H[2], ASL ZARE M[2]

1- Department of Uorology, Mazandaran University of Medical Sciences, Mazandaran, Iran

2- Department of Uorology, Mashhad University of Medical Sciences, Mashhad, Iran

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Introduction

Foreign bodies in the bladder have been commonly reported. However, we describe a rare foreign body which was a carpule containing lidocaine that was removed percutaneously.

Case Report

A 28-year male, married patient was referred to this center with irritative urinary symptoms (frequency, nocturia, and dysuria) initiated a week before. In his history, he mentioned the existence of an ampule in his body and masturbation for seven years. Psychological disorder or drug abuse was not reported. Physical examination was normal except for a mild tenderness in the suprapubic area. A foreign body was observed in pelvic anteroposterior radiography (fig. 1). Cystoscopy under local anesthesia was performed and a lidocaine carpule was detected. Removal throughout urethra was not viable as it was fragile. Thus, we considered percutaneous extraction as the treatment of choice. Open surgery could be an alternative approach.[1,2] Laparoscopic technique has recently been reported as well.[3]

The patient was secured in the supine position. Under general anesthesia a 18 F foley catheter was inserted, the bladder was filled up to its normal capacity with normal saline, and the skin was incised 1 cm long in the suprapubic area, 1.5 cm over the symphysis pubis using scalpel. We entered the bladder with a puncture needle and placed a 0.035 inches J type guide wire as soon as we confirmed that the needle was within the bladder. Tract dilatation up to 30 F was done by a telescopic dilatator and finally a 30 F Amplatz sheet was placed. Cystoscopy was performed using a Wolf 25° nephroscope and a dentistry type lidocaine carpule was seen. It was successfully removed with a grasp (fig. 2,3). Eventually, the skin was sutured with a 2.0 nylon and a 18 F foley catheter was placed for three days. Tree-month follow-up showed complete improvement and no complication.

FIG. 1. anteroposterior radiography demonstrates Lidocaine carpule

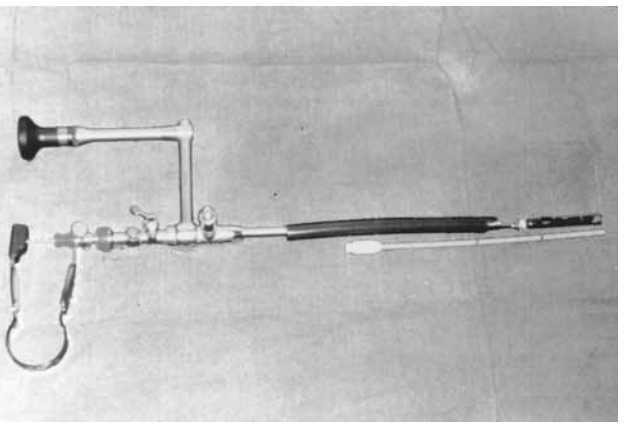

FIG. 2. The nephroscope, grasp, and Amplatz sheet used in this case

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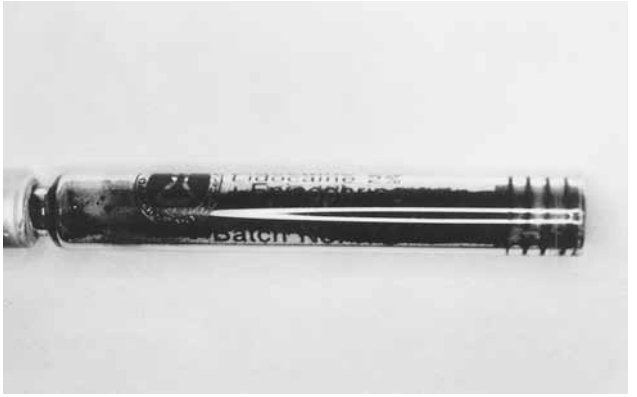

FIG. 3. Lidocaine carpule extracted from the bladder

Discussion

Bladder is the most susceptible part of the genitourinary system for foreign bodies. Usually foreign bodies are pushed to the urethra while trying to eliminate them or involuntary perineal muscle contraction that makes them enter the bladder. In men, they should be passed through a 20-25 cm pathway to reach the bladder. Surprisingly, the urethral curve remains intact and there is no persuading explanation for this event.[4]

Almost everything surrounding the human has been reported as bladder foreign body such as nasal mucosa, hair, pieces of broom-straw, perfume bottle, pearl shaped bottoms, wires, beans, cables, sutures, clips, and toothbrush.[5] According to their main characteristics and origin, foreign bodies are classified as: 1. Particles from animal bodies or insects: dog penis, ant, snake, tail vertebra, etc., 2. Plants and vegetables: grass, wood stick, elm used for abortion, etc., 3. Liquefiable materials: wax, chewing gum, glue, etc. However, some foreign bodies can't be included in this classification.

In some cases they may enter to the bladder unintentionally such as hair while catheterization.[6] A common one is thermometer that slips into the bladder in females.[7] In exceptional cases, foreign bodies has been pushed into the bladder in sexual harassments.[8] Trauma, particularly gunshot is another causal factor. In addition, iatrogenic entrance and migration of foreign bodies from adjacent organs have been described as the mechanism.[5,9]

Percutaneous approach to remove foreign bodies is a safe and effective method and is of great help in the cases in which removal is not possible through the urethra. We successfully used this method considering the limitations of our case. Percutaneous approach is also an ideal alternative to open surgical operation.

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