Endoscopic management of a foreign body inserted through the urethra into the bladder in a male patient: a case report

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ABSTRACT

Foreign body in the urethra is a rare condition, which is caused by the placement of a foreign object in the person's own urethra, with different causes, and requires immediate intervention. We present a 16-year-old male case of self-insertion of a pencil into the urethra migrating into the bladder. The pencil was in prostatic urethra and pulled by holding it with forceps endoscopically. Open surgery is usually required for the foreign body in the urethra and bladder. In the appropriate patients, the foreign body can be removed with endoscopic management.

Key Words: Foreign body, urethra, endoscopic management

Introduction

Foreign body in urethra is a rare condition, which is caused by the placement of a foreign object in the person's own urethra, with different causes, and requires immediate intervention. In most cases, sexual or erotic stimulation providing, psychiatric disorders, mental disorders appear to be the most common reasons.

Objects have commonly included metal rods, bones, screws, pellets, safety pins, a plastic cup, straws, a marble, cotton tipped swab, needles, pencils, ball point pens, pen lids, garden wire, copper wire, speaker wire, Allen keys, wire such as objects (telephone cables, rubber tubes, feeding tubes, straws, string), tooth brushes, household batteries, light bulbs, marbles, cotton tip swabs, plastic cups, thermometers, plants and vegetables (carrot, cucumber, beans, hay, bamboo sticks, grass leaves), parts of animals (squirrel tail, snakes, bones), toys, pieces of latex gloves, blue tack, intrauterine contraceptive devices, tampons, pessaries, powders (cocaine), and fluids (glue, hot wax) [1, 2].

Patients usually apply with the complaints of dysuria, pollakuria, hematuria, urinary retention, penile pain and swelling. The most frequent symptom is dysuria. Hematuria accompanies dysuria. Most patients apply to doctor late because of shame and the fear of social stigma [1-3]. The treatment is not only the retrieval of the foreign material. Also, it consists of the patient long period follow for complication and psychiatric controls.
We present a case of self-insertion of a pencil into the urethra for sexual pleasure during masturbation, and then migrating into the bladder and endoscopic intervention for management.

**Case Presentation**

A 16-year-old boy presented to the emergency service with complaints of pain in the perineum and hematuria. He had no previous history of any significant psychiatric illness. In the anamnesis, he said that he had placed the pencil into the urethra in the case of erection, and after putting the whole of the pencil in it, he had pressed it down through the penis. The pencil had been pushed into the penis. He said that he had tried with the pen in the same way and he had felt sexual pleasure. On clinical examination, he had severe local tenderness and something was palpable in the perineal region. Abundant erythrocytes were present in urinalysis. Computerized tomography (CT) was performed to evaluate organ injury. The foreign body migrated in the bladder was seen in CT. Endoscopy was planned for the patient with abundant erythrocytes in urine analysis. We entered urethra with an endoscope. Mucosal hyperemia and mucosal damage were present in the urethra. The pencil was seen in prostatic urethra and pulled by holding it with forceps (Figures 1, 2, and 3). The patient was catheterized postoperatively and the catheter was

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**Figure 1.** Endoscopic appearance of a foreign body in the urethra.

**Figure 2.** Pencil removed from the urethra.

**Figure 3.** Computerized tomography appearance of a foreign body in the urethra.
taken the post-operative first day. The patient was discharged with oral antibiotic therapy. There was no urological complaint in the first week control after surgery. The psychiatric evaluation was recommended. Borderline personality disorder was detected after the psychiatric evaluation.

Discussion

Although insertion of foreign materials into the lower urinary tract has a rare occurrence, the number of cases reported in male patients has increased in the last 10 years. Patients are often embarrassed to seek medical care initially so they make interventions to retrieve the foreign material themselves. These interventions can lead to a change of position and further injury [1]. Endoscopic intervention is usually insufficient in the treatment of foreign materials. Also, open surgical intervention is usually required [1-3]. In our study endoscopic intervention was achieved without any complication in open surgery requiring patient.

Patients often have pain and anxiety during admission, so if necessary premedication should be performed to relieve the patients and evaluate with appropriate imaging methods [1]. Ultrasonography (US) or CT can be used to assess the location of the foreign material and organ integrity. The most common reason for inserting a foreign material into the urethra is autoerotic and sexual pleasure, especially during masturbation [35].

Aliabadi et al. [6] reported their experience in 15 patients who self-inserted foreign material into the urethra over a 42-year period. The endoscopic intervention was successful in six patients who had foreign material in the anterior urethra. Open surgery was required in five of the remaining nine patients with foreign materials in the posterior urethra and bladder. Only one patient required perinealurethrotomy. The differences in our treatment approach can be explained by the variation in the type and location of the materials.

Rahman et al. [1] reported their experience; Endoscopic retrieval was successful in 16 of the 17 patients. In one case endoscopic retrieval was unsuccessful and perineal urethrotomy was required.

Sexual exotic predispositions, impaired schizoid personality, and borderline personality disorder are common comorbidities reported in patients presenting with foreign materials [7]. In our case, borderline personality disorder was detected after psychiatric consultation. The medical intervention is delayed due to the feeling of guilt and shame in the majority of the cases. Most cases are associated with a psychiatric disorder, drug intoxication, mental disorder, sexual curiosity, or the desire to get rid of urinary symptoms [1, 4, 5].

In a series of 10 self-inserted urethral foreign material cases reported by Mahadevappa et al. [3], the manic depressive psychiatric disorder in two patients, mental retardation in one patient, impulsive behavior in one patient and autoerotic stimulation in two patients were recorded. Lack of partner or spouse and misunderstanding about masturbation were noted as a cause in three patients. Although controversial, psychiatric assessment of each patient is important. This assessment can be beneficial not only in the diagnosis and treatment of any underlying mental illness but also in avoiding self-harmful situations that may arise.

Conclusions

Foreign materials in the urethra and bladder can rarely be treated endoscopically. Open surgery is required in many cases. In our case we achieved open requiring patient endoscopically and patient was discharged postoperative first day without any complication. In these patients, besides removing the foreign material, the underlying and triggering events should be defined and appropriate treatment should be performed.

Informed consent

Written informed consent was obtained from the patient for publication of this case report and any accompanying images.

Conflict of interest

The authors declared that there are no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.
References