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A Case Report of a 10 cm Foreign Body in the Bladder

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ABSTRACT

Background and Objective: The presence of a foreign body in the bladder is a rare occurrence, usually caused by the individuals themselves, or by a part of a Foley catheter remaining in the bladder, or by penetrating trauma. In this study, a case of a pencil being placed in the bladder of a woman with a history of depression is reported.

Case Report: A 44-year-old single female patient with a past medical history of seizures and depression, who complained of left flank pain since about 1.5 months ago and hematuria, burning urination, and pus discharge since about a week ago, visited the urology clinic of Imam Reza Hospital in Ardabil. Due to the absence of specific findings in the patient's physical examination and her lack of cooperation in providing a medical history, a complete ultrasound of the abdomen and pelvis was performed for the patient, which showed the image of an object with dimensions of 98×5 mm diagonally inside the bladder. The patient then underwent cystoscopy, and finally it was removed longitudinally, and she was discharged with oral antibiotics. In the monthly follow-up, the symptoms were resolved and the patient had no complaints.

Conclusion: The results of the study show that in the presence of urinary symptoms and even non-specific symptoms, especially in patients with mental disorders, including depression, the presence of a foreign body in the bladder must be considered.

Keywords: *Bladder*, *Foreign Body*, *Foreign Body in the Bladder*, *Urinary-Genital System*, *Depression.*

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Introduction

The prevalence of patients with complaints of a foreign body in the urinary-genital system is relatively rare. Although accurate statistics of patients presenting with a complaint of a foreign body in the genital system have not been reported, there are studies that show that foreign bodies in the lower urinary system are more often observed in children and patients with mental disorders (1, 2). The bladder is the most common site of foreign body reported (3). Cases such as insertion of a foreign body by the patients themselves, remaining pieces of the urinary catheter, penetration of part of the medical equipment from adjacent organs (such as contraceptive devices from the uterus to the bladder), as well as penetrating traumas are among the causes of the presence of a foreign body (4). There have been many reports of various foreign bodies such as safety pins, clips, plastic toothpicks, ear cleaners, bullets, pieces left over from Foley catheters (due to balloon rupture), thermometers, and even leeches and fish (5, 6).

The most common symptoms that patients present with include frequent urination, burning urination, and hematuria, which sometimes lead to misdiagnosis, such as urinary stones. Also, sometimes the findings are non-specific, and in these cases, especially in the context of patients with mental disorders and children, foreign bodies should be considered (3, 7). Among the helpful paraclinical measures, sonography, CT scan, and IVP (Intravenous Pyelogram) can be used to evaluate the nature, exact location, and type of foreign bodies. A simple abdominal radiograph is very valuable in diagnosing opaque objects (8).

In this article, a case of a foreign body in the bladder (a writing pencil measuring 98×5 mm) that penetrated diagonally into the left lateral wall of the bladder and caused difficulty in its diagnosis and removal is reported. The aim of this study is that in the presence of urinary symptoms and even non-specific symptoms, in the differential diagnoses of infections and urinary stones, the possibility of a foreign body should be considered, especially in children and people with mental disorders, including depression, and adults who try to mislead the doctor with an incorrect history.

Case Report

This study was approved by the Ethics Committee of Ardabil University of Medical Sciences with the code IR.ARUMS.REC.1403.287. The patient is a 44-year-old single woman with a history of seizures and depression, with symptoms including fatigue, lack of hope for life, lack of enjoyment in life, increased sleep, and weight gain since about 9 years ago, who is under treatment with carbamazepine tablets. She visited the urology clinic of Imam Reza Hospital in Ardabil with complaints of left flank pain since about 1.5 months ago and hematuria, burning urination, and pus discharge since about a week ago. Due to the absence of specific findings in the patient's physical examination and her lack of cooperation in providing a medical history, a complete ultrasound of the abdomen and pelvis was performed for the patient, which showed the image of a foreign body with dimensions of 98×5 mm diagonally inside the bladder, so that the tip of the metallic object had penetrated into the left lateral wall of the bladder, and images of echogenic debris floating inside the bladder were evident. The patient underwent cystoscopy (Figure 1). The pencil was removed, and a sedimentary layer had formed on the surface of the pencil (Figure 2).

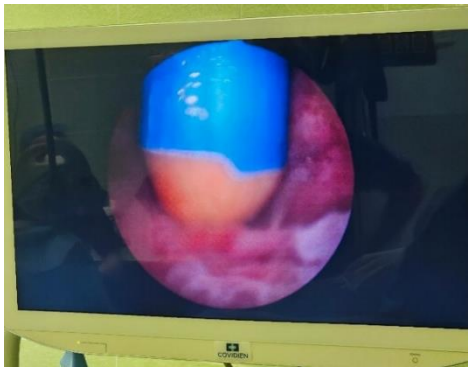

Figure 1. View of the foreign body in cystoscopy

Figure 2. The foreign body

Discussion

In this reported case, there is a foreign body in the bladder with a large length and diameter, which was inserted into the bladder by the person herself, who had a history of depression, and was removed by cystoscopy. As mentioned, foreign bodies in the urinary-genital system are more often seen in people with mental disorders, so that almost one third of male patients who suffered from foreign bodies in the urethra and bladder had a history of major mental disorders (3, 9). In our case, the patient suffered from depression. Rodríguez et al., in 2020, showed that foreign bodies in the genital tract impose a significant financial burden on health care systems, and that the presence of foreign bodies in the genital tract is more common in young female patients, while foreign bodies of the penis and urethra/bladder are more common in older men (9, 10). In a study conducted by Rafique et al. in Pakistan, it was shown that out of 16 reported cases of foreign bodies in the bladder, 10 cases were related to men and 6 cases to women (7). Also, in the study by Datta et al. in India, out of 9 cases of foreign bodies, 6 cases were men and 3 cases were women (4). In our patient, the foreign body was inserted into the bladder by the person herself, who was female.

Clinically, these individuals may rarely remain asymptomatic, or may have non-specific and vague symptoms, or even mimic the symptoms of acute and chronic bladder infection and be mistaken for urinary stones (11). Our patient had also visited the clinic with complaints of left flank pain since about 1.5 months ago and hematuria, burning urination, and pus discharge since about a week ago, and the presence of a foreign body was confirmed by paraclinical measures.

Foreign bodies in the lower urinary tract are often associated with long-term complications such as urinary tract infection, fistula, and urethral stricture (10). Our patient also had a urinary tract infection as a result of the foreign body in the bladder and had purulent discharge from the urethra, and in the urinalysis requested for the patient, a high number of white blood cells was reported. Most foreign bodies in the urinary system can be removed endoscopically (10); in our patient's case, the foreign body was removed by cystoscopy.

There are three reasons for the misdiagnosis of urethral foreign bodies that have been inserted into the urinary-genital system by the patients themselves. The first reason is the rare prevalence of this condition; the second is the patient's failure to provide a correct history to the physician; and the third is the ineffectiveness of simple X-ray imaging for detecting radiolucent objects (12). In dealing with our patient, we were also faced with the patient's failure to provide an appropriate history.

According to this case and other reported cases, in the presence of urinary symptoms and even non-specific symptoms, in the differential diagnoses of infections and urinary stones, the possibility of a foreign body should always be considered, especially in children and in patients with mental disorders, and especially in adults who try to mislead the physician by providing an incorrect history of their problem.

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