

CASE REPORT

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Self-Inflicted Intravesical Bobby Pin in a 6 Years Old Boy

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ABSTRACT Self-inflicted intravesical foreign body is a rare condition in childhood. It is more common in adult patients. Foreign bodies in the bladder can be detected for autoerotic, psychiatric, therapeutic or unclear reasons. In this case, a 6-year-old boy had treatment resistant recurrent urinary tract infection. An opaque body was detected in the pelvic location in the direct urinary system X-ray. An intravesical localized bobby pin was detected on the abdominal ultrasonography. The patient had no previous history of surgical intervention. No additional feature was detected in the physical examination of the patient. There was recurrent urinary tract infection. Infections were resistant to treatment. In the radiological imaging, a bobby pin (wire clip) located in the bladder was detected. It was visualized and removed with cystoscopy.

Keywords: Foreign body; bladder; children

Self-inflicted intravesical foreign body is a rare condition in childhood.^{1,2} Such cases are generally seen in the adult age group. Foreign bodies in the bladder can be detected for autoerotic, psychiatric, therapeutic or unclear reasons.

Foreign bodies are rarely found in the bladder of children. Patients often present with dysuria, frequency, haematuria, urinary tract infection and pain. Diagnosis is usually made by history and clinical examination. A few radiological examinations and cystoscopy are required for diagnosis, especially for treatment planning.

In this case, an intravesically localized bobby pin was detected in a 6-year-old boy. We aimed to present our experience in patient evaluation and management.

CASE REPORT

A 6-year-old male patient was admitted to our clinic with a urinary tract infection that did not respond to treatment. There was a history of nonspecific abdominal pain and a urinary tract infection resistant to repeated treatment for the last 6 months. Physical examination was normal. *Staphylococcus aureus* growth was detected in the urine culture examined at the time of admission. An opaque foreign body was seen in the bladder location in the direct urinary system X-ray (Figure 1). In the urinary ultrasonography, the appearance of the foreign body in the same localization was detected. The patient had no history of previous surgical procedures. Although foreign body was seen in the bladder location on direct abdominal radiography and ultrasonography, it was planned to

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FIGURE 1: Direct urinary system X-ray, foreign body in the pelvic location.

perform non-contrast tomography in the limited area of the lower abdomen in order to evaluate the anatomical exact localization and invasion to the bladder wall (Figure 2). When cystoscopy was performed, a bobby pin was found in the bladder (Figure 3). It was removed transurethrally with cystoscopy.

When the patient's history was detailed, it was learned that while he was scratching the tip of his penis with a bobby pin, his penis escaped inside. The grandmother stated that the child's penis was itchy when he was staying with him during the summer break, and while trying to scratch it with the bobby pin he found at home, he slipped the buckle into the urethra. It was learned that the child, who was afraid of the parents' reaction, did not tell the situation to his family.

In the postoperative follow-up, it was observed that he did not have a urinary tract infection and did not have any symptoms. Consent was obtained from the patient's parents for the case report.

DISCUSSION

Self-inflicted intravesical foreign bodies appear in adults. Intravesical foreign body is a rare condition that can be encountered in pediatric urology practice.¹ It is one of the important issues in the differential diagnosis of lower urinary system symptoms.

Materials detected as foreign body in the bladder include plastic caps, hooked wire, wire buckles, paper clips, metal objects, glass rods and shells. There are also cases where multiple intra-bladder foreign bodies have been reported.

Intrabladder foreign body cases rarely have a clear history and clinical symptoms, often with suspicious trauma histories and treatment-resistant urinary tract infection and/or symptoms.

He may present to the clinic with symptoms such as dysuria, recurrent urinary tract infection, hematuria, pain, swelling of the genitals, urinary incontinence, abscess formation, and purulent discharge.^{2,3}

Self-inflicted foreign bodies in the bladder, which is seen in children and adults, may reflect the underlying psychiatric disorder, as well as incidental



FIGURE 2: Abdominal computed tomography: intra-bladder foreign body.

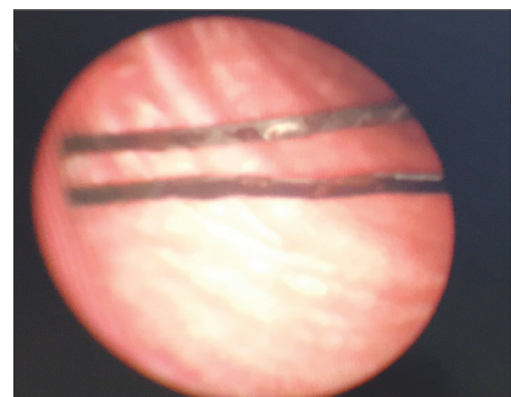


FIGURE 3: Image of a foreign body (bobby pin) inside the bladder with cystoscopy.

or sexual arousal.⁴ In order not to overlook these reasons, routine psychiatric evaluations should be performed in all patients with a self-inflicted intra-bladder foreign body.⁵

Our patient was evaluated by the child psychiatrist. No psychiatric illness or signs of abuse were found. When the patient's history was detailed, it was learned that while he was scratching the tip of his penis with a bobby pin, his penis escaped inside. He didn't tell because he was afraid of his grandmother and parents.

We would like to emphasize once again the importance of taking a detailed history and physical examination in these patients. To the best of our knowledge, as a result of the literature reviews, the case we present is the youngest male patient who was reported as having an intravesical foreign body. Only one 4-year-old female patient has a case report reporting the detection of an intra-bladder pin. Other patients identified in screenings included adolescent and adult patient groups.⁶

Since foreign body cases in the bladder may rarely be encountered in children under the adolescent age group, it should be considered in the presence of an unexplained urinary tract infection.

Detailed clinical evaluation of the patient is important. It is important to determine whether there is urethra or bladder perforation in order to predict foreign body size, shape and risk of trauma. Plain abdominal X-ray, ultrasonography followed by cystoscopy are usually sufficient for diagnosis. Radiopaque foreign body can be clearly seen on plain radiographs. It has been reported that ultrasonography and computed tomography can be performed for diagnosis in some suspected cases.⁷ The definitive treatment is removal of the foreign body, which can usually be removed cystoscopically, open surgery is rarely needed.

The duration of treatment-resistant urinary tract infection in our patient was approximately 6 months. Since we do not know how long the metal body has been in the bladder in the foreground, a detailed anatomical evaluation was provided by preoperative tomography and preparations were made for

open cystostomy. However, during cystoscopy, it could be removed endoscopically because the bobby pin was not impacted on the bladder wall, it was easily held with the help of forceps and it was thin and long.

Removal of intravesical foreign bodies in children poses a number of difficulties, as the size of the pediatric urethra may interfere with safe transurethral removal. In cases where endoscopic removal of intravesical foreign bodies is difficult due to the long and narrow urethra, open cystostomy may be the preferred treatment method to avoid injury to the urethra.⁸ In contrast, the shorter urethra of female patients compared to boys makes the endoscopic removal of intravesical foreign bodies more successful.⁹

Although foreign bodies in the bladder are very rare in children, they should be taken into account in the evaluation of pathological lower urinary tract symptoms. Endoscopic treatment is suitable for most of these patients. The size, number, structure and any associated condition of foreign bodies determine the treatment method.

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Conflict of Interest

No conflicts of interest between the authors and / or family members of the scientific and medical committee members or members of the potential conflicts of interest, counseling, expertise, working conditions, share holding and similar situations in any firm.

Authorship Contributions

Idea/Concept: Sevim Yener; **Design:** Sevim Yener; **Control/Supervision:** Sevim Yener, Zekeriya İlçe; **Data Collection and/or Processing:** Sevim Yener, Cemile Pehlivanoğlu; **Analysis and/or Interpretation:** Sevim Yener, Zekeriya İlçe; **Literature Review:** Cemile Pehlivanoğlu, Sevim Yener; **Writing the Article:** Sevim Yener, Zekeriya İlçe; **Critical Review:** Sevim Yener, Cemile Pehlivanoğlu, Zekeriya İlçe.

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