Transurethral endoscopic removal of urinary foreign bodies in the child

La extracción endoscópica transuretral de cuerpos extraños urinarios en el niño

Dear Editor:

Self-insertion of foreign bodies through the urethra in children is a serious urologic problem. In children, this procedure is common and results from the child’s curiosity about his or her body, and it is more frequent among boys. The child introduces the foreign body through the urethra, and when they lose the tip of the object, they compress the glans and the foreign body migrates superiorly.

The presentation is variable. The child may present with urinary tract infections, dysuria, urinary frequency, lower abdomen pain, hematuria, or even signs of nephritis. Diagnosis is often delayed, after protracted urinary tract symptoms, and a high index of suspicion is required for the diagnosis. The delay in recognition of this condition may lead to the onset of complications such as formation of stones or even bladder rupture.

After diagnosed, the best treatment option is their removal. That is often a challenging condition, and we must then choose the technique that is most appropriate for the given situation. The foreign body can often be removed transurethrally. However, because of the small-caliber child’s urethra, there is always concern about iatrogenic urethral damage. We should choose between endoscopic or open techniques according to foreign body’s size and mobility. Endoscopic techniques should be preferred whenever possible, but some unusual or large foreign bodies may require individual treatment, and sometimes an ingenious method of extraction is required.

We have successfully treated two cases of self-introduction of foreign bodies through the urethra. The two boys, aged 7 and 9, presented with dysuria and hematuria. The first case was initially misdiagnosed as glomerulonephritis, but an abdominal ultrasonography suspected of a foreign body inside the bladder, and it seemed to be a steel pin (Fig. 1). The second case had a ball head pin palpable in the peno-escrotal urethra, which was confirmed in the abdominal X-ray. In both, the foreign body was removed via the transurethral route. The first one was removed endoscopically, with the aid of a grasping forceps. The second one was removed with a sailor’s knot placed with the aid of a grasper, under endoscopic guidance (Fig. 2). The postoperative courses were uneventful.

It is important to keep in mind the diagnosis of foreign body in the urinary tract whenever urinary symptoms are not fully understood. At examination, the objects distal to the urogenital diaphragm can typically be palpated directly. When they are not readily palpable, the diagnosis is usually performed by abdominal ultrasonography or radiography.

After diagnosis, the best management of these patients is the retrieval of the foreign body, in order to solve the symp-
A steel 3-cm long pin with plastic ball head was pushed into the bladder and removed with sailor’s knot placed with the aid of a grasper.

Figure 2

Endoscopic extraction.\(^2\) For intravesical foreign bodies that cannot be safely extracted transurethrally, open surgical removal (suprapubic cystotomy) or percutaneous retrieval using direct transurethral visualization are required.

References

1. Hutton KA, Huddart SN. Percutaneous retrieval of an intravesical foreign body using direct transurethral visualization; a technique applicable to small children. BJU Int. 1999;83:337-8.

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