Foreign bodies in the bladder

Rodríguez-Esqueda M, Montes-González JA, Castro-Marín M, De La Rosa-Barrera H, Montalvo-Uscanga I.

ABSTRACT

The long progression of some of the following cases appears to contradict the common perception that the presence of an intravesical foreign body would be an unbearable condition. Diagnostic delay on the part of the urologist is often due to abnormal alterations hidden by the patient for personal reasons, who often hopes the problem will resolve on its own, thus resulting in said delay and complications. Two cases and their management are presented.

Key words: bullet in bladder, metal bar in urethra, instrument in bladder, Mexico.

INTRODUCTION

Surprisingly, the presence of foreign bodies in the bladder is not an emergency for many patients, which explains the frequent delay in their being diagnosed. An increase in urinary complaints is usually what obliges the patient to seek medical attention. These patients resist seeking such attention due to the fear of being socially stigmatized because of the manner in which the objects have entered the bladder. This occurrence is usually associated with behavioral and mental disorders and with performance of erotic and sexual rites in which the objects accidentally end up in the bladder.

CASE PRESENTATION

Two cases of different cause and progression are presented. Diagnoses revealed some differences but there were management similarities. Treatment of both cases was delayed due to unsuspected diagnosis at the onset of symptoms.

CLINICAL CASE 1

The patient is a 24-year-old man. He was treated by general physicians for urinary infection symptomatology upon presenting with persistent dysuria and occasional
microscopic hematuria. Symptoms continued and a general surgeon ordered ultrasound which revealed a metal object in the bladder. The patient was referred to a urologist who endoscopically confirmed the presence of a long metal intravesical object that perforated the bladder at one end and was situated near the bladder neck (Image 1). The object had been in the bladder for one year prior to symptoms. The object was a thin metal “rod” of approximately 9 cm in length. The distal end was sharp and flat and the proximal end was rounded. Patient was given general endovenous anesthesia with face mask and the object was extracted transurethrally by cystoscopy with moderate difficulty using endoscopic tweezers (Image 2). Patient received antibiotic treatment and used a bladder catheter for 24 hours. His progression was satisfactory.

**CLINICAL CASE 2**

The patient is an 81-year-old man. He had been in a private hospital one year and a half earlier for acute urinary retention due to impaction of 2 stones in the distal urethra. With the patient under local anesthesia the stones were crushed and extracted using Kelly tweezers. Ultrasound was done to check for more stones or prostatic growth and revealed small prostate and a bladder stone of approximately 2 cm. Patient refused endoscopic lithotripsy and 18 months later sought medical attention for microscopic hematuria on two occasions. He presented with occasional dysuria with no prostate symptomatology. Cystoscopy did not reveal the stone until the second revision in which it was localized exactly in the bladder dome (Image 3). The patient had always denied having had previous surgery and no scars had been observed during physical examination. The stone was dislodged by maneuvers with the cystoscope itself and fell to the bladder floor where it was unsuccessfully manipulated with electrohydraulic lithotripsy. Ballistic lithotripsy was then resorted to and when the stone moved, a metallic aspect became apparent. The stone turned out to be a bullet (Image 4). The patient then admitted to having been shot when he was 21 years old and that he was in possession of the bullet that had gone through both his legs and remained lodged in his right femur. It had been removed with no complications by a doctor who then gave him the bullet. The “ghost” bullet in the bladder was the same 32 caliber as the bullet that had been removed from his leg 60 years earlier. Re-examination revealed a 3 cm scar in his interior right thigh and another 4 mm scar on the anterior left thigh similar to chicken pox scars. Extraction of the foreign body was unsuccessful with an ACMI 28 Fr resectoscope sheath and so it was extracted by suprapubic cystostomy. Patient was treated with antibiotics and had a bladder catheter for 10 days. There were no progression complications.

**DISCUSSION**

Anecdotal commentaries among urologists are common in relation to intravesical foreign body management. The wide variety of such events includes stones formed over non-absorbable suture material, intrauterine devices, thermometers, catheter fragments, catheters and guidewires that break during urological procedures and gauzes that mistakenly remain in the bladder. Among the strangest objects found have been sailor’s beads, plastic tubes, pessaries, prosthetic reservoirs for urinary incontinence or erectile dysfunction and even balls of thread. Many objects end up in the bladder due to acts of curiosity or in the search for erotic effects related to sexual activity. When this is the case patients try to
hide how the objects got to the bladder for fear of being judged or stigmatized by the physician. This pathology is also associated with patient mental disorders.

The presence of firearm projectiles in the bladder is obviously associated with gunshot wounds resulting from acts of violence or accidental injury related to hunting. If there are no symptoms, such events can be forgotten and resurface years later, making the presence of such objects in the urinary tract initially baffling.

Many attempts have been made to classify foreign bodies as well as urological management protocols. However, clinical symptoms, the state of the patient, availability of technological resources and the experience of the urologist, added to truthful and opportune information from the patient or responsible relatives in the case of mentally handicapped patients or children should be useful in deciding the best management option. Management can be through endoscopy or open surgery with the goal of minimizing negative anatomical and functional effects on the organs involved, including urethra, bladder, rectum, uterus, arterial vessels, etc. Each case is different and the approach must be individualized. Absorbable material should always be used to avoid future stone formation.

**CONCLUSIONS**

Intravesical foreign bodies tend to be uncommon and their treatment is often delayed due to misinformation on the part of the patient or lack of suspicion on the part of the physician. In addition to the anecdotal aspect of their presentation, this pathology always represents a challenge. Cases should be individualized taking into consideration the state of the patient, diagnostic technological resources, treatments available and management experience.

The origin of intravesical foreign bodies usually arises from treatments for lithiasis, urinary incontinence and erectile dysfunction, fertility control or trauma and urban violence. It must be taken into consideration that patient personal sexuality is confidential and that the patient hides certain practices for fear of being “branded” thus delaying opportune attention.

The necessity for and obligation of the physician to guard the patient’s privacy through discretion and medical secret should be the guarantee that encourages the patient to seek opportune medical attention with a minimum of complications. The possibility of a foreign body should be investigated when there has been no clear response to initial treatment.

**BIBLIOGRAFÍA**