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GIANT VESICAL LITHIASIS: A CASE REPORT AND LITERATURE REVIEW

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ABSTRACT
Giant bladder stones have an incidence of 1% of all urinary stones. They are defined as giants when they weigh more than 100 grams. Bladder stones manifest as symptoms of bladder irritation, dysuria, gross hematuria, recurrent urinary tract infections, urine retention, and suprapubic pain. We present the case of a 54-year-old male patient with giant bladder lithiasis that manifested itself in an atypical way due to his medical history, with successful resolution through surgical treatment.

KEYWORDS: Giant Vesical Calculus, Cystolithotomy, Vesical Obstruction.

INTRODUCTION
Currently bladder stones are rare, their incidence is 5% of urinary stones in general. The clinical presentation is nonspecific, the presence of dysuria, hematuria and suprapubic pain have been described until evolving to acute urine retention in cases of large stones.[1] Bladder stones weighing more than 100 g are rare and are classified as giants.[2] It is suspected that a case of large proportions of lithiasis reduces bladder irritation as the size of the stone increases, because its mobility decreases, reducing the intensity of the symptoms and favoring the delay in medical attention, which in turn causes it to continue increasing in size.[3] We report a case of giant bladder lithiasis, the management, treatment and a review of the literature.

CASE PRESENTATION
We present the case of a 54-year-old male patient, who visited his general practitioner presenting dysuria, weight loss and anorexia, who was treated with nitrofurantoin at a dose not specified for 7 days. In the last days of the treatment, pyuria was added to his condition and the symptoms persisted, so he went to our unit for a new medical evaluation. During the interrogation, he referred as a medical history unspecified spinal surgery secondary to a car accident with sequelae of paralysis and hypoesthesia in lower limbs at 19 years of age, arterial hypertension of 18 years of evolution and myocardial infarction 18 years ago. He does not report a history of nephrolithiasis or previous urinary infections. On physical examination, due to his referred history, he presented paralysis and decreased sensation in the lower limbs and the presence of a scar on the back in the thoracic region secondary to the unspecified surgical procedure. In the abdominal examination, a globose abdomen is appreciated, distended in the suprapubic region, and does not refer to pain on palpation. A foley catheter was placed, which presented pyuria of 700cc volume. The blood analysis studies showed normal results, in the urinalysis the presence of leukocytes, red blood cells and bacteria was detected. Renal and urinary tract ultrasound showed pelvic dilation of the right kidney, secondary to lower obstructive uropathy, partially distended bladder with the presence of large bladder calculus and data compatible with benign prostatic hyperplasia. Due to the clinical findings, a simple abdominal CT scan was performed where a hyperdense image with defined borders is visualized in the pelvic region compatible with large bladder lithiasis. **"Fig. 1"**. It was approached with retropubic cystolithotomy, due to the size of the lithiasis that contraindicated the minimally invasive extractive procedure. A 60 x 55 x 45 mm stone was obtained with a weight of 151 grams. **"Fig. 2"**. The evolution of the patient was satisfactory in the postoperative control.

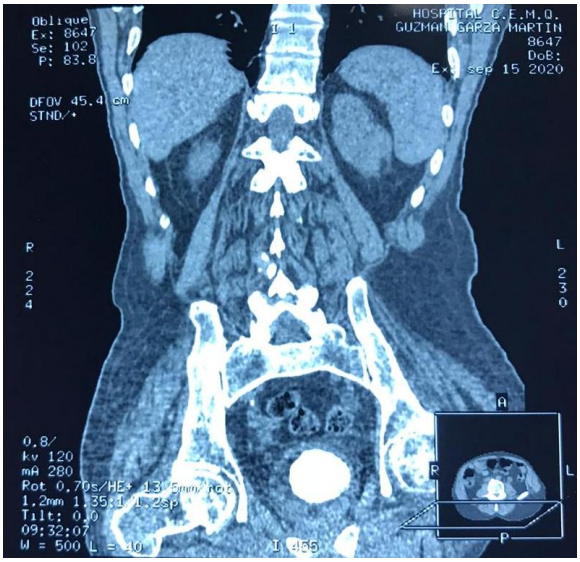

Fig. 1: An abdominal CT scan shows the bladder occupied by a giant stone.

Fig. 2: A giant bladder stone weighing 151 g and measuring 60 x 55 x 45 mm in size.

DISCUSSION

The incidence of giant bladder stones is 1% of all urinary stones and they are more frequent in men.[4] The causes are attributed to obstructions below the bladder neck, as occurs in prostatic hyperplasia, urethral stricture, sclerosis of the bladder neck, or recurrent lower urinary tract infections.[3] Bladder stones are manifested by symptoms of dysuria, gross hematuria, bladder irritation, recurrent urinary tract infections, urinary retention, and suprapubic pain.[5]

In the case we present, it was concluded that the prostatic hyperplasia and the patient's medical history of decreased lower sensitivity hid the symptoms and delayed the diagnosis. For this reason, a large stone was found causing obstructive uropathy as a form of presentation. To make the definitive diagnosis, imaging studies such as ultrasound and radiography are necessary.[1]

But it is also described in the literature that axial tomography is a better option because it has more certainty and helps to rule out differential diagnosis of radiopaque, ovoid and large images in the pelvis, such as calcified myomas or foreign bodies introduced in vagina and rectum.[6]

The various treatment methods range from medications to open cystolithotomy, endoscopic cystolithotomy, and electrohydraulic lithotripsy. There is a consensus that due to the large size of the stones, the approach should be suprapubic cystolithotomy, which is technically easy, safe and with very few postoperative complications.[7]

CONCLUSIONS

Giant bladder lithiasis is uncommon but should be suspected in patients with persistent lower septic and irritative urinary symptoms. Urinary tract ultrasound and pelvic radiography are sufficient to establish a certain diagnosis. Cystolithotomy continues to be the treatment of choice for this condition.

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