

A 61 Years-Old Male Patient With Giant Bladder Stone Weighed Almost 1000 grams

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ABSTRACT— In recent years, the number of bladder stone cases has been increasing in Indonesia. A case report of very large bladder stone weighed almost 1000 grams is a very rare case with a history of urinary tract infection in the past 10 years and history of frequency and urgency urinary. A 61 years-old male patient which in the previous week small stones have been taken out before and bloody urination. The patient also complained that he should change the position when he urinated so that the urine could come out. From the radiological picture obtained a large stone size of 14x10x7.5 cm. The patient underwent open vesicolithotomy with postoperative follow-up without complications. The stone could be removed from the bladder without any residue and infection prevention treatment has performed after the surgery.

KEYWORDS: bladder stone, urinary tract infection, vesicolithotomy, urine static, cystolithotomy

1. INTRODUCTION

In recent years, the number of bladder stone cases has been increasing in Indonesia. The prevalence has increased from 5 percent in the last 5 years. Some cases of bladder stone are often associated with bladder outlet obstruction, genetic or metabolic diseases, and several other extrinsic factors. The chronic intravesical stones that can be treated with several therapeutic modalities, including open vesicolithotomy, transurethral vesicolithotripsy, shock wave lithotripsy, or percutaneous vesicolithotripsy. For stones larger than 5 cm, the modality of choice is open vesicolithotomy.¹

2. Case Presentation

A 61 years-old male patient came to the hospital with complaints of reddish urination with dysuria, frequency, and urgency urinary. The complaints had become worsen in the past week. The patient's daily work is a policeman so he often holds urination while on duty. The patient also has a history of high blood sugar but rarely take the medication. There was no history of trauma or lower urinary tract symptoms such as urinary interruption and terminal dribbling except frequency, urgency, and straining. The patient also did not complain of lower abdominal pain. The patient has a history of the last 10 years routinely by spending 20 cigarettes per day. The signs of urinary tract infection occur due to the formation of stones that run chronically. At the time of coming to the hospital the patient complained of urination and bleeding pain. When a bimanual examination done, there was the hard part. From digital rectal examination, there were no abnormalities in the anus and prostate. Then the patient was taken abdominal photographs and obtained a picture of a compact opacity in the bladder which depicted a bladder stone.

3. Discussion

Urinary tract calculi are the third most common affliction in urinary tract and without right follow up and medical intervention the recurrences can be as high as 50% in 5 years.¹ Bladder calculi mostly seen in man and in developing countries they often found in prepubescent boys.¹ In economically developed countries, epidemiological survey shows that the prevalence rate ranged between 4% to 20% and the prevalence and evidence of urinary tract stone in western country were still increasing in 20th centuries.² Especially the giant bladder stone, is a rare case in urological practice today.³ The stone analysis frequently reveals ammonium urate, uric acid, or calcium oxalate stones and it can be solitary or numerous. Pathologic condition like voiding dysfunction or a foreign body are usually manifested as bladder calculi. All conditions that make urine static can have made voiding dysfunction like in this patient that have habit to hold urination.¹ Patients present in irritative voiding symptoms, intermittent urinary steam, urinary tract infections, haematuria, or pelvic pain. In this case, the patient showed the signs of urinary tract infection occurred due to the formation of stones that run chronically.^{1,3}



Fig. 1. Plain abdominal radiograph showed a large, round calcified pelvic calculi. In diagnosing bladder stone, plain abdominal x-ray and abdominal ultrasound can be used as modalities. The most percentage of bladder stone in x-ray are radiolucent (uric acid) (Fig. 1.). In this patient radiological picture obtained a large stone size of 14x10x7.5 cm (Fig. 2).^{1,4}



Fig. 2. Gross picture of removed bladder calculi, measured 14x10x7.5 cm. There are many techniques and modalities to move the bladder stone and to remove the stone, it should be directed by the underlying cause.

Considering of the size of the bladder stone in this patient, open cystolithotomy was the correct treatment (Fig.3.).^{4,5,6}



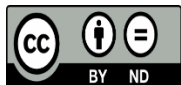
Fig. 3. Open cystolithotomy in giant bladder stone.

4. Conclusion

Bladder stone is the third most common affliction in urinary tract and associated with all conditions that can make urine static. The giant bladder stone is a rare case. The recurrence is high if without right follow up and medical intervention.

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