Candle in Urinary Bladder- A Rare Entity

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Abstract

Foreign bodies in the urinary bladder are not very common. The causes of foreign body may be multiple. We here present a case of self inserted candle in the urinary bladder of a 56-years-old male that was successfully removed by cystoscopy.

Keywords: Urinary bladder; Foreign bodies; Candle

Introduction

Foreign bodies in the male urinary bladder are uncommon. Most foreign bodies in the urinary bladder are self-inserted via the urethra as the result of psychiatric problems, sexual perversion, or attempts to relieve the obstructive voiding symptoms [1]. Diagnosis of these foreign bodies is done by clinical history, physical examination, and radiological imaging. The presentation may be with hematuria, dysuria, and urinary tract infection, retention of urine due to obstruction by foreign body or formation of secondary stones on foreign body. The treatment of foreign bodies is determined by nature, size, location and shape of the foreign body. The endoscopic removal being most commonly used to retrieve these foreign bodies. Here we report an unusual case of self inserted candle in urinary bladder by a middle aged male in an attempt to relieve his voiding symptoms.

Case Presentation

A 56-years-old male presented to emergency department with complaints of acute retention of urine for 6 hours. The patient had history of obstructive lower urinary symptoms for last three years. He was not taking any medication. Patient admitted that he tried to unblock his urethra with a candle to relieve his symptoms. While inserting the candle, it was lost in the urethra. On examination general condition of patient was stable. The bladder was palpable. On genital examination, the tip of candle was palpable in the proximal bulbar urethra. The patient was catheterized with 16 Fr Foley catheters to dislodge the foreign body into the urinary bladder and to relieve urinary retention. The digital examination revealed mild prostatomegaly. The urine examination of patient revealed fragments of wax and hematuria. The results of complete blood count, electrolytes and kidney function test were normal.

The ultrasound screening of the urinary bladder revealed a floating linear echogenic foreign body. The patient was planned for cystoscopy under spinal anesthesia with bupivacaine (heavy) 0.4%. Patient had a linear tear the anterior urethra with mild prostatomegaly. Fragments of wax were floating in urinary bladder. The candle was identified, floating at the dome of urinary bladder (Figure 1), the wick of candle was held by stent removal forceps and the whole assembly was pulled out of bladder. It was seen to be an 8cm long candle (Figure 2).

Figure 1: Cystoscopic view of the candle in the urinary bladder.
Discussion

Foreign bodies in urinary bladder may be due to self insertion in certain psychiatric illnesses, iatrogenic in urological intervention, traumatic or migration from surrounding organs. The sexual perversion, mental illness and abnormal sexual behavior under the influence of drugs and alcohol are the psychological perspectives of self insertion of foreign body into urinary bladder. Among these, the most common driving force for foreign body insertion is sexual in nature where foreign body is inserted into the urethra to obtain sexual gratification [2]. The nature of these foreign bodies can be candle, metallic cable, metallic and plastic tube, pen, pencil, leech and fish [2-4]. Foreign bodies from urethra migrate proximally into the bladder either by inappropriate attempts of retrieving it or deliberate pushing into the bladder to relieve retention. Involuntary perineal contractions may also play a role in the proximal migration [3,4]. In our case patient had presented with acute urinary retention due to impaction of the candle in the urethra, and the tip of foreign body was palpable in bulb urethra. The candle was pushed into the bladder to relieve the obstruction. A similar case was reported where a 2.5 inches paraffin wax was inserted into the urethra in an intoxicated condition by his friends as a practical joke [5].

The presentation of foreign body in the lower urinary tract may be acute as hematuria, dysuria, and frequency, retention of urine or chronically as recurrent urinary tract infection, urethral fistula, stones and related complications. The frequency, dysuria, hematuria, incontinency, external genitalia swelling, and acute urinary retention are the most common presentations [6,7].

The proper history and physical examination can provide the sufficient clue about the possibility of foreign body in the urinary bladder. The nature and location of the foreign body is determined by radiological imaging like X-ray and ultrasonography. At times Computerised Tomography scan may be helpful. The diagnosis is usually confirmed by cystoscopy. In our case an ultrasound was done that showed a linear echogenic foreign body in urinary bladder. The endoscopic management is sufficient to deal with most of the foreign bodies. It is less invasive and can be performed under local or regional anesthesia. In complex cases cystostomy or perineal urethrostomy may be required to remove the foreign body [7,8], where further injuries are expected as a result of endoscopic procedure. In a previously reported case it was not possible to remove the candle by cystoscope as was not possible to grasp by the forceps due to its slippery surface [5]. The candle was dissolved by liquid sterile petrolatum irrigation as a solvent of wax through a rubber catheter [5]. In our case cystoscopy was done and the candle was found floating in the dome of urinary bladder. The wick of the candle was caught in stent removal forceps and the candle was aligned and removed intact. Bladder wash was given to remove the wax fragments. Treatment options for such paraffin foreign bodies are transurethral removal or dissolution or open surgical removal as dictated by the size, location, shape and mobility of the foreign body [9].

Conclusion

The foreign bodies in urinary bladder are not very common. These foreign bodies make their way to urinary bladder usually via urethra. The psychiatric illness or sexual perversion is the most common cause of self inserted foreign bodies. A high index of suspicion is needed in patients with recurrent urinary tract infections, psychiatric histories, and past histories of foreign body insertion to diagnose such cases. The presentation of this event can be varied, hematuria, dysuria & acute urinary retention being common. Cystoscopy provides the best method to confirm and remove the foreign body.

References