Intravesical Foreign Body: A Rare Case Report and Review of Literature

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Abstract

Foreign bodies related to urogenital tract represent a relatively rare pathology and are most commonly found in the urinary bladder. Foreign body of the urinary bladder may occur by migration from surrounding organs or by self-insertion via urethra. Vesicovaginal fistula (VVF) is commonly caused by obstructed labor, gynecological surgeries, occasionally due to malignancy, but rarely by the foreign body; in most cases being ring pessaries. A 25-year-old female presented in our clinic with urinary incontinence and irritative lower urinary tract symptoms. Radiological investigation revealed intravesical foreign body (wooden abortion stick) with VVF. It was removed via suprapubic cystostomy and fistula managed conservatively.

Keywords: Cystectomy, Urogenital tract, Urinary incontinence, Vesicovaginal fistula

INTRODUCTION

Foreign bodies in the bladder may be due to self-insertion through the urethra in line to exotic impulses, underlying psychiatric illness, sexual curiosity, or unusual sexual practice. Other routes are a migration from neighboring organs. Foreign body vary from tissue originating from surrounding organs to metallic structures like intrauterine device (IUCD). It may also happen in cases of alternative medicine.

We present a rare case of 25-year-old female with wooden abortion stick in the urinary bladder presented with vesicovaginal fistula (VVF).

CASE REPORT

A 25-year-old female presented with a 1-year history of increased frequency, urgency, and continuous dribbling of urine. Patient also had a history of insertion of wooden stick for a criminal abortion 7 years ago. She visited many hospitals for the same and treated on line of urinary tract infection (UTI).

On examination, the patient found to be anemic. Rest of systemic evaluation was normal. Per abdomen and digital rectal examination were normal. On per speculum examination, there was continuous dribbling of urine.

Hemogram shows anemia and leukocytosis. Biochemical parameters, serum creatinine were elevated. Ultrasonography suggested an intravesical foreign body. The bladder wall was found to be thickened, but no evidence of intravesical stone was found. Plain pelvic X-ray showed approximately 6.5 cm foreign body. Computed tomography scan abdomen showed intravesical foreign body, detrusor hypertrophy with VVF with bilateral mild hydronephrosis (Figure 1).

A suprapubic cystostomy was performed and exploration confirmed that the foreign body was intravesical. With minimal effort, wooden stick about 70 mm × 10 mm was extracted (Figure 2). Bladder inspection revealed approximately 1 cm defect in the posterior wall. There was no evidence of a stone. Foley's catheter kept in situ for 3 weeks which resulted in spontaneous resolution of fistula. Patient discharged and kept in follow-up for 6 months. There was no recurrence of symptoms.
DISCUSSION

Foreign bodies limited to urogenital tract comprise a rare pathology. Their presence in genitourinary tract predisposes to recurrent infections, calculus formation, bladder outlet obstruction, and renal failure.

Patients are usually ashamed to seek a medical opinion. According to van ophoven and dekerion the most common motive associated with the insertion of foreign bodies into genitourinary tract is sexual or erotic in nature.

The variety of foreign bodies varies with societies, level of development, aim of insertion, and cause. Rafique has identified intravesical foreign bodies as copper wire, a carrot, a lead pencil, an IUCD, surgical gauze pieces, remnants of Foley’s catheter, and a Teflon beak of resectoscope sheath.¹

Clinical presentation of intravesical foreign bodies is usually remarkably constant. Usual presentation is irritative symptoms, sometimes obstructive, when the foreign bodies are large or extending to the urethra. Other features include hematuria, suprapubic pain, and fever.⁴

Common complication follows intravesical foreign bodies are recurrent UTI and stone formation.⁴ Risk of septic shock should always be considered.

Life-threatening complication of intravesical foreign bodies are rare; obstructive uropathy, urinary bladder rupture, VVF, even death of sepsis, renal failure, and squamous cell carcinoma.⁵,⁶

Radioopaque intravesical foreign bodies can be detected on kidney, ureter, and bladder radiography. Non radioopaque substances can be detected with the use of abdominal and transvesical ultrasonography.

Initial management should consists of providing pain relief and control of irritative voiding symptoms by prescribing analgesics and anticholinergic drugs, respectively. Antibiotics will be required for control of UTI and prevention of sepsis in infected patients.

Definitive management is aimed to provide complete removal of a foreign body with minimal complications as in trauma to the bladder, urethra, peritonitis, UTI, and hematuria. Most foreign bodies can be removed either completely or after fragmentation by endoscopic approach. However, the technique used is dictated by the patient’s condition, along with associated urinary tract injuries, size, shape, and nature of the foreign body.

A wire can be removed endoscopically, in some cases; however, in most cases, open surgery is a requisite to minimize urethral trauma during periurethral extraction. Ejstrud and Poulsen reported use of intravesical laparoscopy to untie a complete knot of an electric wire.⁷ Habermacher and Nadler reported use of holmium laser to fragment a detached 26-F resectoscope sheath tip before its transurethral removal.⁷,⁸

CONCLUSION

The presence of a foreign body in genitourinary tract with VVF is an uncommon presentation, hence required a high index of clinical suspicion for diagnosis. Presentation may vary from acute to chronic symptoms, sometimes delayed with the complication that may be life-threatening. It should be considered in young patients with recurrent UTI and poor response to antibiotics. Such patient requires radiological evaluation to aid in management to know nature, size, and location of the foreign body. Method for removal of intravesical foreign bodies will depend on
the nature of the foreign body, age of the patient, and the available expertise and equipment. Most intravesical foreign bodies can be retrieved with endoscopic and minimally invasive techniques without resorting to open surgery. Where psychological abnormality suspected, psychiatric assessment should be carried out.

REFERENCES


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