CASE REPORT

Unusual genitourinary tract activity

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SUMMARY

A 23-year-old woman presented to the emergency department after manually inserting foreign bodies into the urinary bladder through her urethra. A plain abdominal film of the kidneys, ureters and bladder confirmed three radio-opaque densities in the urinary bladder. She was taken to the operating room where cystourethroscopy was performed. At cystoscopy 2 'corn-on-the-cob' skewers and 1 battery were identified but were too large to be retrieved safely with a grasper through the protective sheath. The objects were grasped with a 'sponge-holding forceps' (placed alongside the cystoscope) and extracted one at a time. A psychiatric consultation was sought and the patient was diagnosed and treated for borderline personality disorder. Unusual genitourinary activity (UGUA) has been described for several centuries and is characterised by the deposition of foreign objects in the genitalia.¹ The most common incentive for UGUA is sexual stimulation, but psychiatric disorders and intoxication are also associated.² Management involves retrieval of foreign bodies and evaluation of psychosocial factors.

BACKGROUND

Unusual genitourinary activity (UGUA) in the setting of psychiatric disorders is associated with multiple presentations relating to a diverse range of foreign bodies. Frequency and dysuria are the most common symptoms. Reported objects deposited include speaker wire, rocks, eyewear rims, an AAA battery, open safety pins, plastic caps, straws, a marble and a cotton-tipped swab.³ Endoscopic management is preferable, however open surgery may be required in 5% of cases due to object size or shape.⁴ We report a case of UGUA in the setting of a psychiatric disorder with challenging endoscopic management.

CASE PRESENTATION

A 23-year-old woman presented to the emergency department with a 1-day history of visible haematuria and dysuria. The patient reported self-insertion of a battery and two 'corn-on-the-cob' skewers into her urinary bladder through her urethra 24 hours earlier.

The patient had no prior history of UGUA. The patient had no past medical history of note and was not taking any regular medications. She was currently unemployed. Her marital status was single. She had an eight pack-year history of smoking and denied any illicit drug use. There was no family history of psychiatric illness. Mental state examination was performed. The patient had a

tendency to act unexpectedly without consideration of the consequences. Her mood was unstable. She was prone to outbursts of anger. She had a history of recurrent threats of self-harm. The patient had a history of becoming involved in unstable relationships.

INVESTIGATIONS

Routine blood investigations were normal. The serum creatinine was 77 $\mu\text{mol/L}$, the white blood cell count was $7 \times 10^9/\text{L}$, and the haemoglobin was 14 g/dL. Mid-stream urine (MSU) sample was positive for leucocytes, blood and nitrites and negative for protein.

A plain abdominal film of the kidneys, ureters and bladder (KUB) demonstrated three radio-opaque densities in the urinary bladder (figure 1).

TREATMENT

The patient was taken to the operating room where cystourethroscopy was performed. After induction of anaesthesia, a 28-Fr resectoscope sheath and a 30° lens were inserted into the urethra. Inspection of the urinary bladder revealed three mobile foreign body objects at the trigone. None of the objects were embedded in the bladder mucosa. A rigid grasper was introduced over the 28-Fr sheath and although a purchase was obtained on each object individually, they were too large to be retrieved safely through the protective sheath. Removal of the entire resectoscope with a foreign body held in the grasper tip was not performed for fear of urethral injury. A 'sponge-holding forceps' was introduced into the urethra alongside a 21-Fr cystoscope. The three foreign bodies were safely retrieved one at a time using the forceps (figure 2). The bladder was inspected again and noted to be normal with no residual foreign bodies. The bladder was emptied and no urethral catheter was placed.

OUTCOME AND FOLLOW-UP

A psychiatric consultation was sought and the patient was diagnosed with borderline personality disorder based on the history and mental state examination. The patient was discharged home with a course of prophylactic antibiotics. The patient was treated for borderline personality disorder with dialectical behaviour therapy.

DISCUSSION

Self-insertion of foreign bodies into the urethra occurs most often in the setting of attempted sexual stimulation, psychiatric illness and intoxication.² A broad range of objects have been reported in

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Figure 1 A plain abdominal film of the kidneys, ureters and bladder (KUB) showing radio-opaque densities in the urinary bladder.

the urethra and bladder including pens, pencils, cotton swabs, tampons, needles, screws, rubber, rocks, eye-wear, straws and marbles.^{3 4} Reported symptoms include haematuria, dysuria, frequency, pelvic pain, poor stream, urinary retention and

Figure 2 Two 'corn-on-the-cob' skewers and one battery retrieved from the bladder.

urgency incontinence.^{3–5} Rahman *et al* reported that 41% of patients had a psychiatric disorder in their series of UGUA.³ The most common psychiatric diagnosis is schizophrenia.⁶

Plain radiographic imaging is useful to locate objects, to identify object size and number, and to determine if the objects are calcified in order to optimise pre-operative planning. For objects in the urethra, pushing the object in a retrograde fashion into the bladder can result in easier management and less urethral trauma.⁶ Reported management techniques include cystoscopy, meatotomy, internal urethrotomy, open cystostomy and perineal urethrotomy.^{3 6 7} An element of ingenuity is often required with endoscopic management and devices such as forceps, snares and stone retrieval baskets have been utilised.³ We report the first case of using a 'sponge-holding forceps' in tandem with cystoscopy to safely retrieve large foreign bodies from the urinary bladder.

Complications associated with urethral foreign body insertion include urethral false passage, abscess, diverticula, fistulae and strictures.^{3 8} Psychiatric consultation is recommended in order to prevent the long-term urological complications associated with repeated UGUA.

Learning points

- ▶ Unusual genitourinary activity management involves retrieval of foreign bodies and evaluation of psychosocial factors. Schizophrenia is the most common psychiatric comorbidity.
- ▶ Foreign body retrieval should be carried out endoscopically if possible, although this can prove challenging.
- ▶ A 'sponge-holding forceps' in tandem with cystoscopy can be used to safely retrieve large foreign bodies from the female urinary bladder.

Contributors EMC collected the data and drafted the report. NFD obtained the images and supervised drafting of the report. JF supervised drafting the report.

Competing interests None declared.

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