

Urethral polyembolokoilomania: not a bread-and-butter issue

Jeff John^{ID} and Ken Kesner

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Abstract: Urethral polyembolokoilomania, the self-insertion of a foreign body into the male urethra for sexual gratification and autoerotism, is an uncommon urological emergency with potentially severe consequences. We present the case of a 27-year-old male who presented to our emergency unit after apparently sustaining a penile injury during sexual intercourse. Clinically, a foreign body was thought to be palpable, extending from the mid-shaft of the penis to the penoscrotal junction. Pelvic X-rays confirmed a radiopaque penile foreign body in the region of the anterior urethra. Cystoscopy confirmed the presence of an encrusted foreign body in the anterior urethra. It noted that the surrounding mucosa was very inflamed with areas of necrosis, suggesting that the foreign body had been present in the urethra for some time. To avoid further urethral trauma, we approached the foreign body *via* an external urethrotomy and removed a plastic knife in three parts. The urethra was repaired over a 16F catheter. The patient had an uneventful postoperative course, and a peri-catheter urethrogram 6 weeks after the procedure showed no signs of contrast extravasation or urethral stricture.

Keywords: Urethral polyembolokoilomania, foreign body in urethra

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Introduction

Polyembolokoilomania ('PEKamania') is a group of disorders characterised by the self-insertion of objects into body orifices.¹ Those who practice urethral PEKamania occasionally present to urological departments with potentially severe consequences that can prove fatal. Objects reported to have been inserted into urethras include pens, pencils, toothbrushes, wires, household batteries, light bulbs, vegetables, plants and even leeches and animal bones.^{2–5} We report a case in which a patient inserted a plastic, disposable knife into his urethra, and review the literature with regard to the frequency, diagnosis and management of urethral PEKamania.

Case presentation

A 27-year-old male was brought to our emergency unit complaining of a swollen penis and difficulty urinating after recent sexual intercourse. He was not forthcoming as to the exact nature of

the injury but denied a 'cracking' sound that might have suggested a 'fractured' penis. On further history he reported no history of intellectual disability, psychiatric disorders or illicit drug use. The general examination found him well with normal vital signs. The abdominal findings were unremarkable, with no evidence of urinary retention. The penile shaft was markedly swollen, and a foreign body was palpable, extending from the mid-shaft of the penis to the penoscrotal junction. Pelvic X-rays confirmed a radio-opaque foreign body in the region of the anterior urethra (Figure 1). Despite evidence to the contrary, the patient emphatically denied inserting any foreign body into his urethra. Prophylactic antibiotics were administered, and cystoscopy under general anaesthetic confirmed an encrusted foreign body in the mid urethra. The surrounding mucosa was inflamed with areas of necrosis, suggesting that the foreign body had been present for some time. The foreign body appeared impacted and could not be manipulated endoscopically back into the

Correspondence to:
Jeff John
Division of Urology,
Department of Surgery,
Frere Hospital and Walter
Sisulu University, East
London, 5200, South Africa
jeffveenajohn@gmail.com

Ken Kesner
Division of Urology,
Department of Surgery,
Frere Hospital and Walter
Sisulu University, East
London, South Africa



Figure 1. Pelvic X-ray showing a radio-opaque foreign body in the region of the anterior urethra.



Figure 2. Photograph of the retrieved foreign body – a plastic knife retrieved in three pieces; the two smaller pieces heavily encrusted.

bladder. In order to avoid further trauma to the urethra, we chose to proceed by way of an open urethrotomy. We retrieved a plastic knife split into three pieces, with two of the smaller pieces heavily encrusted (Figure 2). The urethra was repaired over a 16F Foley catheter, and a suprapubic ‘push-in’ catheter was inserted into the bladder. His postoperative course proved uneventful, and a peri-catheter urethrogram 6 weeks after the procedure showed no signs of contrast extravasation or urethral stricturing. The catheters were removed at 6 weeks, after which the patient re-established normal voiding. On further enquiry, he reported no further lower urinary tract symptoms or impotence. When asked how the plastic knife had found its way into his urethra, all the

patient would say was: “I had sex.” Although we advised the need to monitor him periodically for long term complications, especially urethral stricture, the patient defaulted all further urology follow up. Furthermore, despite having being referred to psychiatry for evaluation and an initial assessment done, our patient also defaulted all psychiatric follow up.

Discussion

Urethral PEKamania, the self-insertion of foreign bodies into the urethra, is uncommon. Although the exact prevalence is unknown, reports in the literature have increased.⁶ The true incidence is likely under-reported since patients are often too embarrassed to offer a true history of the incident.⁷

A predominantly but not exclusively male phenomenon,⁸ urethral PEKamania may occur during autoerotic sexual gratification or while a couple is intimate, and can be motivated by mental illness, drug or alcohol-induced confused states or just natural sexual curiosity.⁸⁻¹⁰ Foreign bodies have been inadvertently inserted into the urethra during attempts to terminate a pregnancy, prevent conception, or gain relief from urinary symptoms.^{5,11}

The diagnosis of urethral PEKamania should be relatively straightforward. Patients, however, are usually not forthright due to the stigma associated with this behaviour, making the diagnosis challenging. Our patient denied having inserted a foreign body into his urethra even when confronted with the plastic knife we had found there. Early diagnosis can further be confounded by the fact that patients may present with minimal symptoms.¹² Symptomatic patients will present with a poor urinary stream, urinary retention and features of urethritis or recurrent genitourinary infections.² Objects distal to the urogenital diaphragm may be clinically palpable, whereas objects above that level are not.⁶ When the pelvic X-ray is equivocal, a perineal ultrasound may help identify radiolucent objects along the penile urethra. Computed tomography is indicated when a urethral foreign body is suspected of having migrated to adjacent organs. Radiological investigations are necessary for all patients to determine the exact size, shape, number, position and orientation of the foreign body before therapeutic intervention.⁸ Flexible urethroscopy allows for direct visualisation of the foreign body but is

used as an adjunct to the less invasive radiological investigations.

Management of patients with urethral foreign bodies needs to be individualised. Empiric therapy for gram-negative organisms (fluoroquinolone or trimethoprim and sulfamethoxazole) should be commenced before the procedure and continued for 1 week.^{8,13} Non-invasive measures such as manually milking the urethra to expel the object may be successful when dealing with non-impacted objects of the distal penile urethra.¹³ Crawford *et al.* described a novel extraction technique. Under ultrasound guidance, a 6F paediatric silicone foley catheter was passed into the urethra and beyond the foreign body. The catheter balloon was then inflated proximal to the foreign body using the recommended 2 ml of sterile saline. Under real-time ultrasound visualisation, the catheter and inflated balloon were slowly withdrawn, guiding the foreign body distally and to exit the urethral meatus.¹⁴ If these manoeuvres are unsuccessful, endoscopic removal with the help of biopsy forceps or stone baskets is an alternative option. Open surgery should be considered a last resort.¹⁵ Options include a meatotomy, external urethrotomy for anterior urethral foreign bodies or a suprapubic cystotomy for posterior urethral foreign bodies.¹⁶ The latter may also be performed after the urethral foreign body has been endoscopically repositioned into the bladder. Still, sharp, large or impacted foreign bodies lodged in the urethra should preferentially be managed with open surgery because repeated attempts at endoscopic extraction in these instances may cause more urethral trauma, which may further predispose the patient to urethral stricture, the most common recognised complication of urethral PEKamania. Other complications include stenosis, mucosal tears, infection, abscess, pain, erectile dysfunction, urethral diverticulum, fistula formation, further lower urinary tract symptoms and urethral avulsion.^{15,17} These complications are dependent on the type of foreign body, depth of the initial insertion, repetition of foreign body insertion, and the extraction modality necessary for removal.¹³

There is controversy as to whether patients who insert foreign bodies into their urethras require mandatory psychiatric assessment. It may be worthwhile considering the high incidence of mental illness in these patients, but it is not a universally accepted practice.⁶ Patients who present repeatedly engaging in this unusual behaviour

are not uncommon. Although the exact incidence of repeated offenders is unknown, it is more common among incarcerated and institutionalised individuals or in the setting of psychosis and intoxication.^{14,18} Simms *et al.* reported the case of a 50-year-old male who had presented with more than 40 encounters of urethral foreign body insertion in a setting of intoxication and/or psychosis. The repeated episodes of foreign body insertion into the urethra ultimately resulted in a urethral defect at the penoscrotal junction. A decision was made not to attempt urethral reconstruction as the defect allowed easy, nonoperative retrieval of the urethral foreign bodies.¹⁸

Physicians need to maintain a professional and non-judgmental attitude toward these patients. A recent commentary by Khoo *et al.* highlights how PEKamania was historically tainted as a taboo, and patients at the time would rather perish than seek medical attention. Consequently, patients can present late with complications such as obstructive uropathy, Fournier's gangrene, vesicovaginal fistula, squamous cell carcinoma and even death from septic shock or uraemia. Society is significantly more liberal now, but the stigma persists.¹⁹

Conclusion

Urethral PEKamania, the self-insertion of foreign bodies into the urethra, poses a diagnostic and management challenge for the urologist. Radiological investigations to determine the morphology and position of the object are critical before surgical intervention. Most cases can be managed with endoscopic techniques, but management needs to be individualised. There should be a low threshold for open surgery in the case of sharp or large, impacted urethral foreign bodies.

Author contributions

JJ reviewed the literature and drafted the manuscript. KK reviewed and edited the manuscript. All authors issued final approval for the version to be submitted for publication.

Conflict of interest statement

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ORCID iD

Jeff John  <https://orcid.org/0000-0002-6139-810X>

References

1. Bello J, Badmus K, Babata A-L, *et al.* Polyembolokoilamania: self-insertion of transistor radio antenna in male urethra. *Niger Med J* 2013; 54: 206.
2. Van Ophoven A and DeKernion JB. Clinical management of foreign bodies of the genitourinary tract. *J Urol* 2000; 164: 274–287.
3. Rafique M. Intravesical foreign bodies: review and current management strategies. *Urol J* 2008; 5: 223–231.
4. Mitterberger M, Peschel R, Frauscher F, *et al.* Allen key completely in male urethra: a case report. *Cases J* 2009; 2: 7408.
5. Kochakarn W and Pummanagura W. Foreign bodies in the female urinary bladder: 20-year experience in Ramathibodi hospital. *Asian J Surg* 2008; 31: 130–133.
6. Bedi N, El-Husseiny T, Buchholz N, *et al.* ‘Putting lead in your pencil’: self-insertion of an unusual urethral foreign body for sexual gratification. *JRSM Short Rep* 2010; 1: 1–5.
7. Mak CW, Cho CL, Chan WK, *et al.* Per urethral insertion of foreign body for erotism: case reports. *Hong Kong Med J* 2019; 25: 320–322.
8. Rahman NU, Elliott SP and McAninch JW. Self-inflicted male urethral foreign body insertion: endoscopic management and complications. *BJU Int* 2004; 94: 1051–1053.
9. Gonzalgo ML and Chan DY. Endoscopic basket extraction of a urethral foreign body. *Urology* 2003; 62: 352.
10. Sukkarieh T, Smaldone M and Shah B. Multiple foreign bodies in the anterior and posterior urethra. *Int Braz J Urol* 2004; 30: 219–220.
11. Sharma UK, Rauniyar D and Shah WF. Intravesical foreign body: case report. *Kathmandu Univ Med J* 2006; 4: 342–344.
12. Moon SJ, Kim DH, Chung JH, *et al.* Unusual foreign bodies in the urinary bladder and urethra due to autoerotism. *Int Neurourol J* 2010; 14: 186–189.
13. Palmer CJ, Houlihan M, Psutka SP, *et al.* Urethral foreign bodies: clinical presentation and management. *Urology* 2016; 97: 257–260.
14. Crawford SB, Lowry D and Watts SH. Evaluation and management of urethral foreign bodies and description of a novel ultrasound-guided catheter-based extraction technique. *J Am Coll Emerg Physicians Open* 2021; 2: e12398.
15. Amiroune D, Bouchikhi AA and Adawi F. Retained self-inserted foreign body into the urethra associated with sequela urethral stenosis: a case report. *J Med Case Rep* 2014; 8: 244.
16. Mahadevappa N, Kochhar G, Vilvathy KS, *et al.* Self-inflicted foreign bodies in lower genitourinary tract in males: our experience and review of literature. *Urol Ann* 2016; 8: 338–342.
17. Chan G, Mamut A, Tatzel S, *et al.* An unusual case of polyembolokoilamania: urethral avulsion from foreign object use during sexual gratification. *Can Urol Assoc J* 2016; 10: E181–E183.
18. Simms A, Chappidi M, Yang H, *et al.* Urethral defect in setting of recurrent urethral foreign body insertion. *Urology* 2020; 137: e12–e13.
19. Khoo JR, Wu GTC and Yeung BKF. Re: Per urethral insertion of foreign body for erotism: case reports. *Hong Kong Med J* 2019; 25: 498.