



Trauma and reconstruction

Self-filling of male urethra with silicon jell to achieve erection: A case report

Mahmoud Mustafa^{a,b,*}, Hamzeh Al Zabadi^{c,**}

ARTICLE INFO

Keywords:

Urethra
Foreign body
Urethrotomy

ABSTRACT

Self-insertion of foreign body into male urethra represents heterogeneous group of cases in terms of causes, symptoms and management. We reported a case of 60-year old male patient filled his urethra with silicone-jell. Patient had severe penile pain and difficult urination. Physical examination revealed palpable hard mass starting from distal part of prostatic urethra to midpenile urethra. Rigid cystoscopy showed complete occlusion of urethra. Laser fragmentation and mechanic extraction failed. Open surgery was decided. Midline incision was performed at the distal end of foreign body in the penile urethra. The foreign material was extracted successfully.

1. Introduction

Polyembolokoilamania refers to insertion of foreign body into body orifices. The prevalence of this condition is unknown and probably under-reported due to embarrassment of patients.¹ There is no consensus on the role of psychiatric consultation for patients with urethral polyembolokoilamania. Foreign bodies are diverse in nature and their extraction involves multiple procedures and surgical techniques. We present a unique case where the patient filled his urethra with silicone-jell to achieve penile erection which resulted in difficult and painful urination.

2. Case presentation

A 60-year-old male patient who had erectile dysfunction filled his urethra with silicone-jell to achieve erection. Patient started suffering from pain in his penis and from difficult urination with severe lower urinary tract symptoms. After two weeks of persistent symptoms, patient was referred to our hospital. Physical examination revealed palpable mass at the proximal part II revision of penile urethra. No urinary retention was detected at the real abdominal ultrasound. The patient underwent cystoscopy which showed foreign material occluding urethra completely starting from midpenile urethra. Cystoscopy couldn't pass, instead, 9.5fr sem-irigid ureteroscope was passed over the guidance of

4fr ureter catheter until the bladder was reached. The end of silicone material was detected at the distal end of prostatic urethra at the level of membranous urethra. Fragmentation of the foreign body by yag-laser energy was conducted by sem-irigid ureterscope. However, no fragmentation occurred. Mechanical extraction was also performed but failed because the silicon material was large in width (1.1cm) and length (12cm). Open surgery was decided and 1–2cm midline incision in skin was performed at the distal border of the palpable mass. Dissection of urethra and identifying the distal edge of the silicone material were identified (Fig. 1). Silicone material as one bulky unit from small midline incision of urethra (Fig. 2) was successfully extracted. Foley catheter (18fr) was placed and primary closure of urethra, subcutaneous tissue and skin were performed as three layers. Foley catheter was removed after 10 days. Post-operative follow-up showed normal calibration of urine and no post-voiding residue was detected.

3. Discussion

Many cases reported self-insertion of foreign body in the urethra of both sex with male majority at all age groups.² Although the type of foreign body can be any material, the causes are limited either to erotic, sexual or psychotic reasons.³ In a single institution case series of urethral foreign body that included 27 cases: 26 were male and only one was female.⁴ Unlike the reported cases, in our study the inserted material

^a Urology Department, An-Najah National University Hospital, An-Najah National University, Nablus, Palestine

^b Medicine Department, Faculty of Medicine and Health Science, An-Najah National University, Nablus, Palestine

^c Public Health Department, Faculty of Medicine and Health Sciences, An-Najah National University, Nablus, Palestine

* Corresponding author. Department of Urology, An-Najah National University Hospital, An-Najah National University, Nablus, Palestine.

** Corresponding author.

E-mail addresses: dr_mahmoud681@yahoo.com (M. Mustafa), halzabadi@gmail.com (H. Al Zabadi).



Fig. 1. Foreign material being extracted from the urethral midline by incision.



Fig. 2. The extracted foreign material measuring 12 cm in length and 11 mm in width.

was silicone-jell to achieve penile erection or enlargement for sexual stimulation. No similar case in literature was found. Diagnosis of such cases is usually conducted by physical examination and history of patient. Simple radiologic examination like X-ray may not be diagnostic as the material is not radiopaque. Therefore, cystoscopy remains the best method to diagnose the case. Here, the patient sought to be operated on the same day without undergoing any radiologic investigations. Shortening the pre-operative period by minimizing the radiologic investigations is advised to encourage the patient to seek therapy. We have diagnosed the patient depending on physical examination and history where immediate endoscopic intervention was applied.

Management of such cases should be individualized, although there are three common methods; (1) non-operative procedure performed in the out-patient clinic under local anesthesia⁴; (2) endoscopic methods;

and (3) the open surgery. The first two options are the most common, depending on the size, nature and location of the foreign body.⁵ Palmer et al. reported his experience in 27 cases and the most common technique was manual extraction with extrinsic pressure ($n = 19$, 54%).⁵ Other methods included endoscopic retrieval ($n = 8$, 23%), open cystolithotomy ($n = 1$, 3%), and voiding to expel the foreign body ($n = 7$, 20%).⁴ Open surgery can be urethrotomy or cystolithotomy. Cystolithotomy is more preferred than urethrotomy because urethral surgery might end with urethral stricture. Hence, pushing the foreign body from urethra to the bladder should be tried. Here, the diameter of silicone material was wide (11mm). Therefore, neither mechanical extraction nor pushing the foreign body to the bladder were possible because the silicon material couldn't have been passed through the membranous or prostatic urethra. Therefore, open surgery was unavoidable.

Although open surgery may be mandatory, we believe that cystoscopy is essential to define the nature, place and size of the foreign body. Here, cystoscopy was conducted but failed to pass the foreign material and hence we used ureteroscopy 9.5fr to detect the end of silicon material and to evaluate if the foreign material was fixed or adhered to urethral mucosa. By this procedure, we were able to exactly define the place of urethral incision which was a very important intra-operative decision. Incision was performed at the level of distal part of the foreign body immediately in midpenile urethra. However, if the incision was conducted at the proximal part of the foreign material near to prostatic urethra, we couldn't be able to extract it as the diameter was more than the diameters of the prostatic urethra. To identify urethra, we placed ureter catheter and Foley until the midpenile urethra to help identifying urethra during dissection. Urethral stricture, cavernous body and spongiosum injury should be avoided. Long term complications of foreign body in the male urethra are urethral stricture, recurrent infection and erectile dysfunction.⁵ In 27 patients with urethral foreign body, post-removal complications included urinary tract infection ($n = 7$), sepsis ($n = 4$), urethral false passage ($n = 5$), laceration ($n = 5$), and stricture ($n = 1$).⁴ Clearly, the complications are high and therefore we suggest that urethral surgery should be conducted by an experienced-urethral surgeon to avoid or minimize such complications with excellent outcomes.

4. Conclusion

Diagnosis of foreign body should be achieved with minimal threshold of investigation. Cystoscopy is considered the backbone in diagnosis and management of urinary tract foreign body. Although non-operative procedure performed in the outpatient clinic is the mostly used, if open surgery is required, surgery should be conducted by an experienced hand in urethral surgery to minimize post-operative long-term complications.

Ethics approval and consent to participate

The study was reviewed and approved by An-Najah National University IRB committee on 30 April 2021 with Reference number: (Med. April, 202/30). All procedures performed in the study involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Consent for publication

Written informed consent was obtained from the patient for publication of this study and accompanying images.

Availability of data and material

The datasets generated during and/or analyzed during the current

study are available from the corresponding author on reasonable request.

Funding

None.

Authors' contributions

MM conducted the surgical operation. MM and HA designed and coordinated the study protocol and drafted the manuscript and conducted the data collection and analysis. All authors read and approved the final manuscript.

Authors' information

MM is a Professor of Urology at An-Najah National University Hospital and affiliated also to the faculty of medicine and health sciences at An-Najah National University. HA is an associate professor of Public Health and Epidemiology at An-Najah National University-faculty of medicine and health sciences.

Declaration of competing interest

The author(s) declare that they have no competing interests.

Acknowledgements

The authors would like to thank An-Najah National University Hospital and University for the permission to conduct this study.

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