

Urethral Foreign Body in Children

Mandal T¹, Halder P^{2,*}, Mandal KC³, Chakraborty P² and Mukhopadhyay B⁴

¹Department of General Surgery, R. G. Kar Medical College, Kolkata, West Bengal, India

²Department of Pediatric Surgery, R. G. Kar Medical College, Kolkata, West Bengal, India

³Department of Pediatric Surgery, Dr. B. C. Roy Post Graduate Institute of Pediatric Sciences (PGIPS), Kolkata, India

⁴Senior Consultant Pediatric Surgeon, Apollo Gleneagles Hospital, Kolkata, India

*Corresponding author: Pankaj Halder, Associate Professor, Department of Pediatric Surgery, R. G. Kar Medical College, Kolkata, West Bengal, India; Tel: 09231798777; E-mail: pankaj.cnm@gmail.com

Abstract

Children with Self-inflicted urethral foreign body is rare. They need careful observation and evaluation as the urethral injury is troublesome with sharp/pointed or relatively long objects. Awareness about the entity makes the diagnosis easier and so also its management. Here we report two such cases who presented to us with acute urinary retention due to urethral foreign body. We treated them successfully by removing the foreign bodies under anesthesia.

Keywords: Children; Foreign body; Sharp; Management; Urethra; Anesthesia, Awareness

Introduction

Foreign body (FB) in the urethra has rarely been reported in pediatric age group. Children usually insert a FB to the urethra for autoerotic, mental illness, or no definite reasons. The diagnosis requires prior clinical experiences with an awareness of the entity as a suggestive clinical history may not always be available [1]. The management of these patients depends on the type, size, location, shape and mobility of the FB and the expertise of the treating doctor. We present two cases of urethral FB and discuss their presentations, diagnosis, and management.

Case Report

Case one

A 5-year-old boy was brought to the emergency with a history of self-insertion of a long slender FB (hairclip) in the urethra. His mother narrated that the child suddenly started crying while playing. Mother saw a tip of hairclip in the urethral meatus. There was difficulty in voiding, and they rush to the hospital without any attempt of manipulating it. The patient was restless and unable to pass urine (urinary bladder was full). On examination we found a tip a hair clip within the urethra. The child did not have any previous history of mental illness or psychological disorder. An X – Ray was done to know the exact location and the

plan for further treatment. Patient was resuscitated accordingly and the FB was gently removed under anesthesia with the help of an artery forceps (Figure 1). There was no clinical evidence of urethral injury or urethral bleeding. The patient was catheterized for 24 hours and discharged on the next day. On 3-weeks follow-up the child was doing well.

Case two

A 2-year-old girl was presented to the emergency with excessive crying and pain in suprapubic region. During history taking we suspected the urethral FB and found the same being impacted in the urethra at its distal part. There was no history of burning micturition, hematuria, and colicky abdominal pain. There was no past history of mental illness. We brought the patient to the operation theatre (OT) for evaluation under anesthesia (EUA). During EUA, we noticed a round FB with an uneven surface was impacted in the distal end of the urethra. We removed it simply with a forceps (Figure 2). The patient was kept in observation for 24 hours and discharged on the next day.

Discussion

A FB in the urethra is a urologic emergency. Self-inserted FB in children with psychosocial problems have been reported in literature. The types of FB includes pencil, electric cables, pins,

Received date: 18 January 2021; **Accepted date:** 27 January 2021; **Published date:** 29 January 2021

Citation: Mandal T, Halder P, Mandal KC, Chakraborty P, Mukhopadhyay B (2021). Urethral Foreign Body in Children. SunText Rev Pediatr Care 2(1): 115.

DOI: <https://doi.org/10.51737/2766-5216.2021.015>

Copyright: © 2021 Mandal T, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

metal rods, hair clips, screws, tiny toys, needles, wires etc. K Naidu et al. showed a male preponderance of the condition (male: female=1.7:1) [2]. The possible causes of self-insertion of urethral FB include auto-erotic sexual stimulation, psychiatric illness, iatrogenic or no defined reason. However, none of our patients had above stated medical illness. These patients may present with symptoms of urinary tract irritation, dysuria, lower abdominal/ pelvic pain, acute urinary retention, microscopic or gross hematuria, and fever [3].

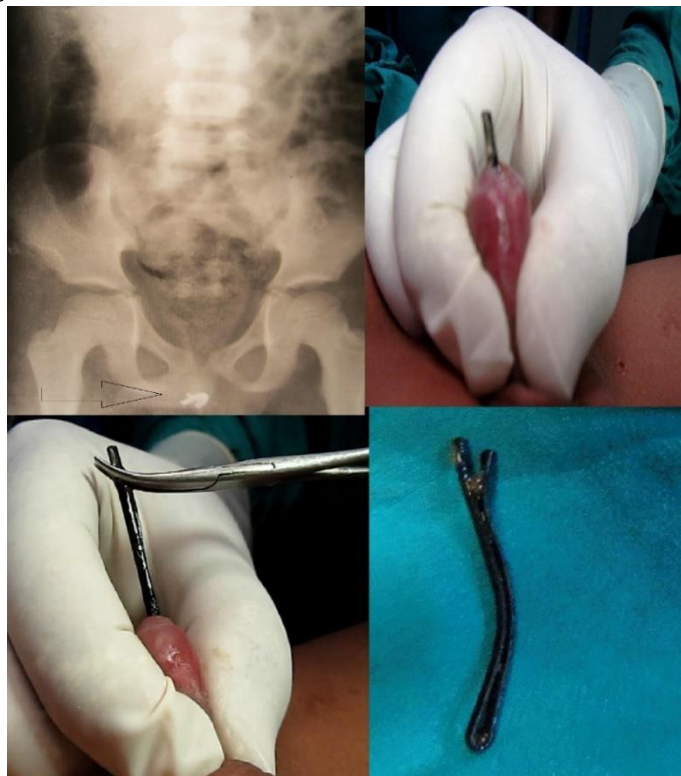


Figure 1: X-ray and operative pictures of a long slender urethral foreign body in a 5-years old male child.

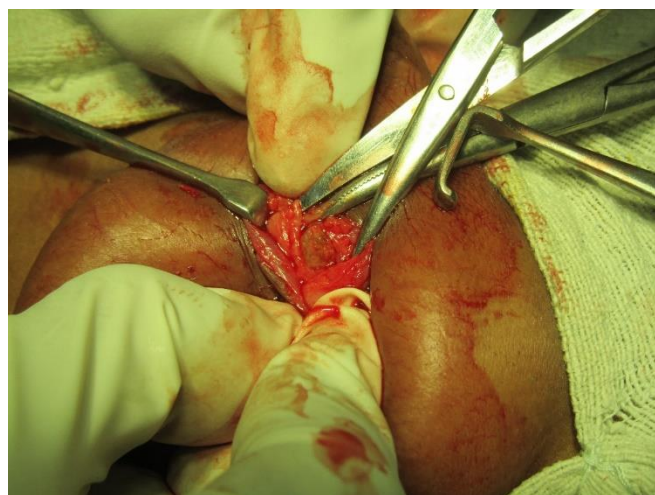


Figure 2: Intraoperative picture of urethral foreign body in a 2-years old female child.

The younger children may come with unnatural and excessive crying and they cannot point out the exact location of the pain. When urinary symptoms are overlooked by the parents and the attending clinician, the condition may lead to delayed diagnosis and development of the complications such as urethral injury, migration of FB into the bladder, bladder perforation, urethrocuteaneous fistula, recurrent urinary tract infection and sepsis [4]. A suggestive history of the urethral FB may not always be obtained from the child, especially from a mentally ill toddler. Diagnosis should be done by proper history obtaining from the attending parents and thorough clinical examination. A FB distal to the urogenital diaphragm may be palpable whereas the proximal one is often impalpable. A plain x-ray helps in diagnosing the radio-opaque FB but for the radiolucent one, ultrasonography is the choice.

Practically, removal of a FB requires greater patience than a surgeon initially anticipates. Method of removal of a FB depends on its nature, shape, size, location, surface, and the mobility within the urethra [5]. Removal of a FB from a frightened and uncooperative child should be done in the OT and preferably under sedation or anesthesia even if the FB is readily seen or felt in the meatal tip. In our case, we removed the FB under sedation, using a holding forceps. Endoscopic or open surgery (meatotomy/ external or internal/ urethrotomy/ suprapubic cystectomy) is reserved for an impacted FB or a FB that migrated into the bladder [6].

Conclusion

Awareness of this entity should be raised by various academic events from doctors to the health care provider in primary health care level as they are the first level of contact of the health systems. Additionally, screening of mental health and motive of the patient should be addressed to prevent the subsequent occurrence.

References

1. Ceran C, Uguralp S. Self-Inflicted Urethrovesical Foreign Bodies in Children. Case Rep Urology. 2012.
2. Naidu K, Chung A, Mulcahy M. An unusual urethral foreign body. Int J Surgery Case Rep. 2013; 4: 1052-1054.
3. SaiSwaroop Y, Darakh P, Amlani D. Self-insertion of urethral foreign body in a child: A Rare Case Report. Int J Curr Medical Applied Sci. 2015; 9: 22-24.
4. Tahaoglu M, Ozturk S, Ozturk H. Self-insertion of needle as urethral foreign body after sexual gratification: An unusual case report. Pediatric Urology Case Rep. 2014; 1: 10-14.
5. Lee YL, Huang HJ. Self-Inflicted male urethral foreign body insertion complicated with overflow incontinence and



- scrotal abscess. Incontinence Pelvic Floor Dysfunction. 2013; 7: 66-67.
6. Chung PH, Traylor J, Baker LA. Urethral foreign body: removal of degraded magnetic spheres using Hartmann ear forceps. Urology. 2014; 84: 1214-1216.