

**Mysterious secondary Vesical calculi caused due to an electric coiled wire: unusual cause of secondary Vesical**

**Calculi: A case report**

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**Abstract**

Foreign bodies are commonly reported in the bladder. The presence of urinary bladder foreign body has been interesting topic representing a challenge of diagnosis and management. This is one such interesting case of a 45-year-old male patient, who came to our hospital with chief complains of Pain in abdomen, burning micturition, and dysuria. Examination yielded tenderness in suprapubic region, with no guarding or rigidity. USG and X-ray KUB were suggestive of Vesical calculi measuring 7\*5 cm.

Patient underwent open cystolithotomy as the calculi was greater than 5 cm. Thus, an open bladder wall incision was made to remove the calculi. Only to our surprise, intraoperatively, Vesical calculi was actually an electric wire more than 180 cm in length which was severely calcified. Therefore, we here in report a case of a foreign body that mimicked Vesical calculi.

Possibility of secondary Vesical calculi due to foreign bodies should always be kept in mind.

**Keywords:** USG, X-ray KUB, Calculi.

**Introduction**

Foreign bodies are commonly reported in the bladder, presenting with complains such as Lower abdominal pain, Pain during urination, Frequent urination, Difficulty urinating or interrupted urine flow, Blood in the urine, Cloudy or unusually dark-coloured urine<sup>(1)</sup>. A wide range of foreign bodies has been reported in the urinary bladder, including encrusted sutures, surgical staples with stones, needles, pencils, household batteries, gauze, screws, pessaries, ribbon gauze, parts of Foley catheters, broken parts of endoscopic instruments<sup>(4)</sup>. We here in report one such interesting case with an unusual finding of Vesical calculi.

**History and Examination**

A 45-year-old male patient came to our hospital with chief complains of pain in abdomen and burning micturition, dysuria. There was no history of haematuria, pain during urination or frequent urination.

On examination patient had tenderness in supra pubic region. There was no guarding or rigidity.

**Investigations**

USG was performed at another set up and was suggestive of Vesical calculi measuring 7\*5 cm and x-ray KUB was

done at our institute. Careful preoperative examination was performed to avoid the risk of bladder wall perforation during the surgery.

As it was a straight forward diagnosis of Vesical calculi and it is difficult to remove a stone of more than 5 cm with the help of cystolithotripsy (endourologically). We decided to go ahead with an Open Cystolithotomy for this case.

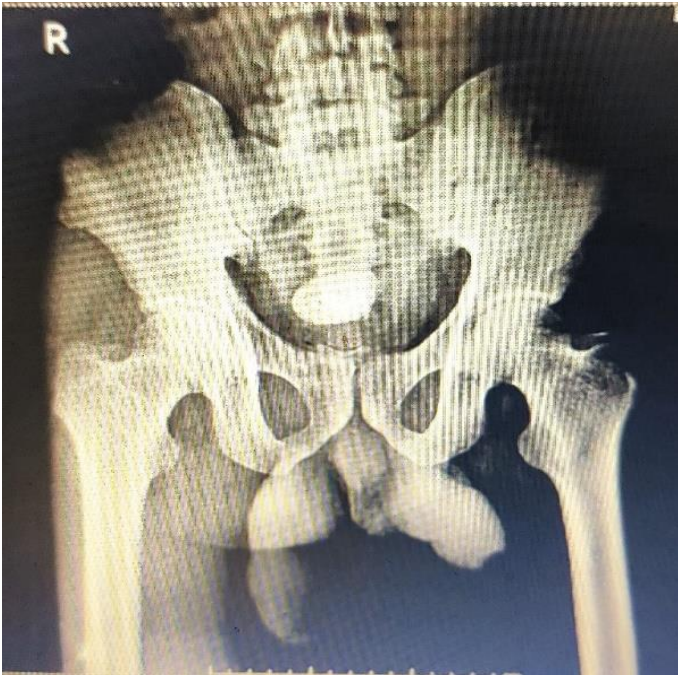


Fig 1: x-ray KUB showing Vesical calculi.

#### **Intra-op**

The calculi was more than 7cm in size. Patient underwent open cystolithotomy.

Thus, an open bladder wall incision was made under spinal anaesthesia and almost the entire foreign body mass was excised in a single lump.



Fig 2: Vesical calculi due to encrustation and deposition. Only to our surprise, intraoperatively, Vesical calculi was actually an electric wire(stone-like) of more than 180cm in length which was considered to have been intravesically curled into a spiral and severely calcified, and was misdiagnosed as Vesical calculi. Careful surgery was performed to avoid bladder wall perforation.



Fig 3: Uncoiled electric wire with sponge holder

## Results

Foreign bodies can enter into the urinary bladder through iatrogenic mechanisms, migration from adjacent organs, via the urethra, or as a result of trauma. Moreover, self-insertion<sup>(2,3)</sup> is also a major contributor to the incidence of foreign bodies in the urinary bladder and is usually performed for sexual gratification. In our case, the patient presented late and did not give proper history as patient was embarrassed and thus was primarily diagnosed as Vesical calculi. Foreign body as an electric wire so long is an unusual finding.

Foreign bodies in the urinary bladder pose a great challenge to the surgeons, removal of the foreign body from the urinary bladder has a good outcome. Also Psychiatric evaluation is recommended in patients with self-inflicted foreign body doing so may reduce the risk of recurrence.

## Discussion

- Foreign body introduction into the lower urinary system is extremely uncommon.<sup>(2,3,4)</sup> Various self-inserted foreign bodies, such as needles, pencils, ballpoint pens, pen lids, garden wire, copper wire, speaker wire, safety pins, Allen keys, wires, telephone cables, rubber tubes, feeding tubes, straws, string, toothbrushes, house batteries, light bulbs, marbles, cotton tip swabs, plastic cups, thermometers, plants and vegetables (carrot, cucumber, beans, hay, bamboo sticks, grass leaves), pieces of latex gloves, blue tack, toys, tampons, pessaries, intrauterine contraceptive devices, cocaine, powders, and fluids (glue, hot wax). and such items, are described in the literature.<sup>(8,9,10)</sup>
- The male urethra is frequently the target of self-insertion of foreign objects for auto erotic and sexual purposes, particularly during masturbation.<sup>(5,6,11)</sup>
- The majority of patients frequently put off seeking therapy out of fear of embarrassment, guilt, and social

shame<sup>(5)</sup>. This may result in repeated self-removal efforts, which may result in urethral damage and migration of foreign objects. Only a small percentage of occurrences are linked to psychiatric conditions, drug use, mental disorientation, sexual curiosity, or the need to relieve urinary problems<sup>(12)</sup>. Exotic impulses—often sexual in nature—a disordered schizoid personality, borderline personality disorder, and exotic impulses have all been described as co-morbidities in individuals who have foreign body insertion as their primary presenting complaint<sup>(11)</sup>.

- Physical examination is the most frequent method of diagnostic confirmation. Foreign objects are easily perceptible distal to the urogenital diaphragm. To determine the location, direction, connection, and impact of a foreign body on adjacent viscera, a pelvic X-ray and computerized tomography of the abdomen and/or pelvis may be helpful<sup>(9)</sup>.
- The physical makeup and shape of the foreign body influence the removal technique. The goal is to keep erectile function intact while minimizing damage. Endoscopic procedures using forceps, snares, and baskets to remove foreign things that are distal to the urogenital diaphragm frequently result in success and therefore become the norm.<sup>(8,9)</sup>
- Auto erotic behaviour and sexual enjoyment, particularly during masturbation, are typically mentioned in the majority of urological case reports on the introduction of foreign objects into or on the penis as a likely reason of this aberrant behaviour<sup>(5,6,11)</sup>. The unique technique employed to remove the object is appropriately given more attention, but it is equally vital to understand the likely causes of this behaviour through psychiatrist consultation so that counselling and treatment as a whole may be used to prevent a repeat of the experience.

• There are a few psychoanalytical hypotheses that explain self-insertion of devices for sexual fulfillment by combining sadomasochistic, impulsive, and manic rudiments with paraphilia. • Only a few urology references in the literature study examine the reason. an analysis of numerous articles.

The following are contributory variables that may result in self-introduction of foreign bodies, according to reviews of several papers in common textbooks and a Med-line search.

• The beginning event, according to Kenney's idea, is an unintentionally discovered pleasant stimulation of the urethra, which is followed by repetition of this action with items of unknown hazard, motivated by a certain psychological propensity for sexual gratification<sup>(13)</sup>.

• The individual's orgasm depends on the presence of the fetish, making urethral manipulation a paraphilia that combines sadomasochistic and fetishist aspects. He thought it demonstrated a return to the urethral stage of sexuality as a result of a painful experience or intense libidinal drive<sup>(14)</sup>.

• Another explanation is urethral masturbation, which involves repeatedly inserting items for sexual stimulation into the urethral orifice. However, medical assistance is only sought when the item becomes stuck<sup>(7,15)</sup>.

• In sadistic sexual abuse, the perpetrator attempts or incites a sense of pain in the victim or partner in order to raise the intensity of the sexual encounter. The many techniques mentioned include the insertion of foreign objects, the use of force, and restraints.<sup>(15)</sup>

• The introduction of a foreign body can result from intoxication and subsequent inebriated sex play.<sup>(16)</sup>

• Mitchell created the psychiatric theory that female identity and rejection of the maleness were represented by intra-urethral insertions. The patient wants to have

something else placed in the penis rather than having the penis inserted (feminine identification).<sup>(13)</sup>

• Increased sexual activity (hyper sexuality with or without improper sexual expression) is known to occur in older dementia patients. Hausserman provides an example account of a person who frequently placed strange objects in their penis while suffering from dementia of the Alzheimer's type<sup>(17)</sup>.

• Intellectually challenged: Patients who are intellectually challenged have a desire to engage in sexual activity.

Although the research does not mention the insertion of foreign bodies, 60–70% are known to engage in strange sexual behaviour<sup>(18)</sup>.

### Conclusion

The extraction method for a foreign substance is determined by its morphology and location, and is frequently accomplished endoscopically. To stop repeat incidents, it is necessary to examine and document the underlying psychological causes of the act, minimize further harm, and avoid infection.

### References

1. A. Bantis, p. Sountoulides, c. – et al., “perforation of the urinary bladder caused by transurethral insertion of a pencil For the purpose of masturbation in a 29-year-old female,” case reports in medicine. In press. View at: google scholars
2. B. Jani, s. Aldujaily, and n. Katiyar, “case report of a very long foreign body in urinary bladder,” the internet journal Of urology, vol. 4, no. 1, 2006. View at: google scholar
3. G. Mukerji, a. R. Rao, a. Hussein, and h. Motiwala, “self-introduction of foreign body into urinary bladder,” journal of Endourology, vol. 18, no. 1, pp. 123–125, 2004. View at: publisher site | google scholar

4. rahman nu, elliott sp, mcaninch jw. Self-inflicted male urethral foreign body insertion: endoscopic management And complications. Bju int 2004;94:1051-3.
5. Van Ophoven A, deKernion JB. Clinical management of foreign bodies of The genitourinary tract. J Urol 2000;164:274-87.
6. Gonzalgo ML, Chan DY. Endoscopic basket extraction of a urethral foreign Body. Urology 2003;62:352.
7. Aliabadi H, Cass AS, Gleich P, Johnson CF. Self-inflicted foreign Bodies involving lower urinary tract and male genitals. Urology 1985;26:12-6.
8. Mannan A, Anwar S, Qayyum A, Tasneem RA. Foreign bodies in the urinary Bladder and their management: A Pakistani experience. Singapore Med J 2011;52:24-8.
9. Bedi N, El-Husseiny T, Buchholz N, Masood J. Putting lead in your pencil: Self-insertion of an unusual urethral foreign body for sexual gratification. JRSMB Short Rep 2010;1:18.
10. Rahman NU, Elliott SP, McAninch JW. Self-inflicted male urethral foreign Body insertion: Endoscopic management and complications. BJU Int 2004;94:1051-3.
11. Sukkarieh T, Smaldone M, Shah B. Multiple foreign bodies in the anterior And posterior urethra. Int Braz J Urol 2004;30:219-20.
12. Kochakarn W, Pummanagura W. Foreign bodies in the female urinary Bladder: 20-year experience in Ramathibodi Hospital. Asian J Surg 2008;31:130-3.
13. Kenney RD. Adolescent males who insert genitourinary foreign bodies: Is Psychiatric referral required? Urology 1988;32:127-9.
14. Wise TN. Urethral manipulation: An unusual paraphilia. J Sex Marital Ther 1982;8:222-7.
15. Craissati J, Gordon H, Grubin D, Gunn J, Middleton D. Disordered and Offensive sexual behavior. In: Donald J. West, Forensic Psychiatry: Clinical, Legal & Ethical Issues. (Reprinted 1999). 1<sup>st</sup> ed., Ch. 13. Butterworth-Heinemann; Great Britain; 1995.
16. Williams RJ. Foreign body retained in the urethra. Br J Surg 1957;44:429-30.
17. Haussermann P, Goecker D, Beier K, Schroeder S. Low-dose cyproterone Acetate treatment of sexual acting out in men with dementia. Int Psychogeriatr 2003;15:181-6.
18. Kulkarni SM, Salve SA, Kolte SP, Rangam M, Vartak KP, Trivedi VD. Self introduced foreign bodies in the lower urinary tract. Bombay Hosp J 1996;38:885-7.