

FOREIGN BODIES IN MALE URETHRA

A. K. DATTA * AND A. K. CHANDRA †

Summary

A series of six cases of exogenous foreign bodies of various types in male urethra are reported. Diagnosis was made from history and clinical examination in five cases. Straight X-Ray was helpful in one. Removal of foreign bodies did not present any difficulty. No complication was observed during follow up.

Foreign bodies in male urethra are not seen very commonly in urologic practice. Apart from some cases in mental asylum, they are mostly seen in sexual perverts who choose to tickle their urethra as a form of masturbation.

We have come across six cases of foreign bodies in male urethra in the Department of Venereology and Sexual Disorders, Medical College, Calcutta during the ten year period from 1964-1973. Due to their unusual feature, we consider it worthwhile to report them. One of our cases has already been reported¹.

Poulet² catalogued a long list of urethral foreign bodies as early as 1880. Rose³ made a review of literature on foreign bodies in urinary tract. More than 650 papers have been published on this subject. However, reports in the Indian literature are few and far between.

The following table summarises the salient features in our cases. During the period under consideration we have

* Assistant Professor, Department of Venereology and Sexual Disorders

† Rader, Department of Surgery
Medical College, Calcutta

Received for publication on 17-6-1978

seen three cases of urethral calculus which have not been included in this series.

Clinical features

The psychological status of all the patients were normal. The ages of patients varied from 18 to 46 the average age being 32 years. Three of them admitted to regular habit of masturbation by introducing electric wires or plastic rods into their urethra. Two of these three were married but separated from their wives for a long time. The onset of symptoms and signs varied and depended on the character of the foreign body. Painful urination and a purulent urethral discharge were the common presenting manifestations present in 4 of our 6 cases. Urethral bleeding or hematuria and painful erection were the presenting features in one case (Case 6). Complete or incomplete retention of urine was present in most cases. The retention of urine was not present when the foreign body was hollow (tube) to permit the urine to trickle through as in case 3. Two cases presented themselves for removal of the foreign bodies before any symptoms developed (cases 3 and 5). A large object like a pen top produced a bulge in the urethra in case 3. There was less irritation with smooth metallic

TABLE 1

| Case No. | Age | Marital status | History of perveted sex | Nature of Foreign Body | Method of introduction | Presenting features |
|----------|-----|-----------------------|-------------------------|---|------------------------|---------------------------------------|
| 1 | 22 | Single | — | Half Burnt Bidi | Forced | Urethral discharge |
| 2 | 35 | Married but separated | + | Knotted electric wire (Fig 1) | Self-inflicted | Dysuria |
| 3 | 35 | Married | — | Clipless top of a fountain pen (Fig 2a) | Forced | History of Palpable foreign body |
| 4 | 18 | Single | — | Plastic rod (Fig 2b) | Self-inflicted | Urethral discharge |
| 5 | 35 | Married but Separated | + | Electric wire-2 pieces (Fig 2c) | Self-inflicted | History of introduction |
| 6 | 46 | Married | — | Green grass stalk 2 pieces (Fig 2d) | Self-inflicted | Dysuria and bleeding painful erection |

object than with rough objects like sponges, etc. Self introduced objects often produced gross infection (Case 4).

Diagnosis

Diagnosis of urethral foreign bodies does not pose any problem if the history is available. But often the patient conceals the history out of shame and the diagnosis may be missed by the unwary unless the possibility is kept in mind.

The diagnosis in case 1 was established on the fourth day only as it was missed on the first visit due to inadequate history.

Clinical examination and exploration of distal urethra with a crocodile forceps or sinus forceps is sufficient to establish the diagnosis in most cases. A catheter or a sound produces a characteristic 'grate' against a calculus⁴.

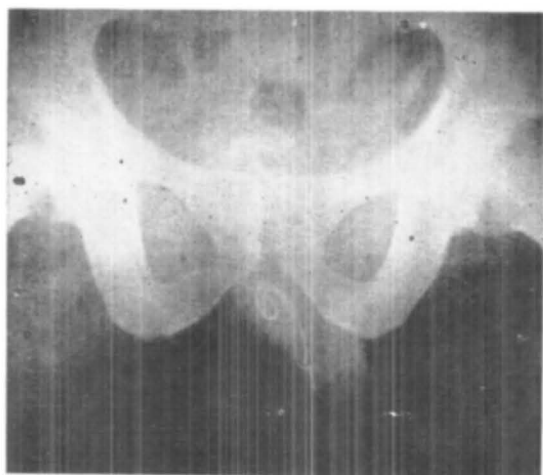
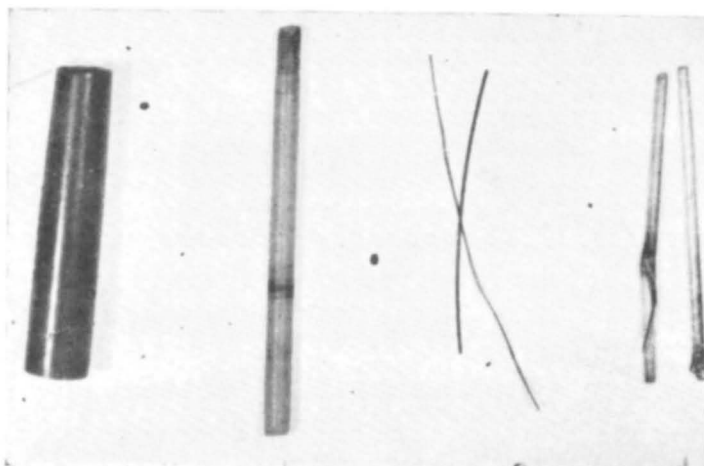


Fig. 1 X-Ray of Case No. 2 showing knotted electric wire in the bladder and urethra.

X-Ray study will locate and at times identify the foreign body. Straight X-Ray is justified if there is suspicion of the foreign body slipping into the bladder or remaining broken in the proximal urethra. X-Ray in case 2 revealed a knotted coiled electric wire partly in bladder and partly in the urethra.

Urethrography may outline the foreign body and its exact location. Non-radio-opaque foreign bodies like grass, paraffin, wax, plastic, rubber material etc. are visualised through

**Fig. 2**

Photograph showing (a) clipless top of a fountain pen (b) plastic rod (c) 2 pieces of electric wires and (d) 2 pieces of green grass stalk.

urethroscope. Urethroscope, panendoscope or non irrigating endoscope can localise a small foreign body or the distal end of large foreign body. Almost in all our cases, the foreign bodies were in the distal part of penile urethra and could be palpated.

Management

No set rule can be made for management. Each object must be tackled as an individual problem according to its character, size and location⁵.

A calculus lodged at meatus may be removed by manipulation or meatotomy. If it is lodged in the posterior portion it is better to push it back into the bladder with a sound and patient is usually able to pass it through urethra spontaneously⁶.

All the foreign bodies in this series were taken out by gentle manipulation with the help of small artery forceps or sinus or crocodile forceps. The mild concomitant urethritis present in a few patients subsided spontaneously and no untoward complication was found on follow up even upto two years.

Discussion

Foreign bodies in the male urethra may be of exogenous or endogenous source. By far the largest group is of

exogenous type. Most of the exogenous foreign bodies are introduced by the patients themselves. In children, presence of foreign body is more often seen in females whereas, in adults, it is more common in the males³.

Self introduced foreign bodies commonly occur in persons during masturbation, intoxication or drunkenness specially in persons with abnormal psyche. Some may pass tubular objects like catheter, electric wire or plastic tubes through the urethra into bladder to get relief from prostatism. When a catheter or tubular structure is passed into urethra it may slip from the grasp of the patient and get lost in the urethra. On occasions the tube or the wire may become knotted in the bladder so that it cannot be pulled out through the urethra. This makes the patient to seek medical help⁸. Sowmini et al⁷ reported a psychologically normal patient who sportingly introduced a twisted electric cord into his urethra which he could not remove. Rama Rao et al⁸ reported a patient with schizoid personality who introduced a long binding needle for relieving an itchy sensation.

Gordon⁹ removed over a dozen safety pins from the bulbous and proximal parts of the urethra which formed a

bladder like cavity during autopsy of a mentally defective patient who died of peritonitis presumably following perforation of bladder by a pin introduced from outside. Many objects, small and large, soft and hard have been reported to be removed from urethras. Stabler¹⁰ reported removal of two nails in a patient with urethritis of 12 years duration by external urethrotomy.

Malingering infrequently leads to introduction of foreign bodies into urethra.

Forceful introduction of foreign bodies by friends and foes has also been reported. Strauss¹¹ reported a sprig from a pine branch introduced into urethra of an intoxicated person by one of his friends. In British Guiana cases of forcible introduction of steel arrow-heads as a form of punishment has been recorded¹². Forceful introduction of a long wire into urethra which became knotted in the bladder necessitating surgery has also been reported¹³. Accidental introduction of foreign bodies into the urethra are also recorded. Biswas reported a case of urethritis due to a stalk of green grass 9 inches in length which entered the urethra accidentally. Foreign bodies may be introduced into male urethra during open or transurethral surgery. Packs, sponges etc. may be left inadvertently in the prostatic fossa after supra pubic surgery³. Haemostatic gauze if not dissolved or washed out may act as a nidus for stone formation³. Fragments of surgical instruments such as catheters, bougies, glass tubes, pieces of silver nitrate and cannula of a syringe have been mentioned as foreign bodies in urethra (Herman, 1938). Other reports are those of clinical thermometer 16 and 3 pairs of tissue forceps in a patient with multiple sclerosis¹⁷.

Foreign bodies in urethra may also be seen as a result of penetrating injuries. Pieces of clothing, ball of hair, pieces

of bone, shell fragments during war injury may all lodge in urethra.

The commonest endogenous foreign body which occur in the male is a urethral calculus.

Acknowledgment

We are grateful to Superintendent, Medical College Hospital, Calcutta for permitting us to utilise the hospital records.

References

1. Datta AK, Ghosh SK and Roy NK : An unusual case of urethritis due to foreign body in male, *Indian J Dermatol Venerol*, 30 : 260, 1964.
2. Poulet A : A treatise on foreign bodies in surgical practice. Wood, New York, 1880, p 113 (quoted by 14).
3. Rose DK : Foreign bodies in urinary tract, *Urology*, Edited by Campbell M, WB Saunders Company, Philadelphia, 1954, p 843.
4. Hamm FC and Weinburg SR : *Urology in general practice*, JB Lipincott Company, Philadelphia, Spain, 1958, 232.
5. Campbell MF and Harrison JH : *Urology* 3rd Edition, WB Saunders Company, Philadelphia, London, Toronto, 1970, p 768.
6. Eisendrath and Rolnic : *Urology*, 4th Edition, Medical Dept, US Army, Lippincott, 1938, p 287.
7. Sowmini CN, Chellamuthia C and Dharmalingam PK : Impacted Foreign body in the urethra, *Indian J Dermatol Venerol* 40 : 1, 5, 1974
8. Rama Rao RV and Venkataswamy T : Urethritis due to a Foreign body, *Indian J Dermatol Venerol*, 40 : 246, 1974.
9. Gordon LZ, *Urol Cut Rev* 45 : 500, 1941 (Quoted by 14).
10. Stabler AA, *J Urol*, 55 : 397, 1946 (Quoted by 14).
11. Strauss W, *Seltene Fremdkorper in Harnrohre bzw, Blase*, *Ztschr Urol*, 51 : 368, 1958 (quoted by 3).

12. Carruther RH: An unusual urethral foreign body, *Canad MAJ* 80 : 829, 1959.
13. Zeitlin AB and Miller CO : Foreign body in lower part of urinary tract, *J Internat Coll Surgeons*, 28 : 291, 1957.
14. Biswas AK : Foreign body urethritis, *Brit J Vener Dis*, 38 : 163, 1962.
15. Herman L : *The Practice of Urology*, Saunders, Philadelphia, 1938, p 404, 465. (Quoted by 14).
16. Orasion : *Encyclopedie francaise d'urologie*, Edited by A Pousson and E Desoos, Doin, Paris, 5 : 621, 1922 (Quoted by 14).
17. Riley A : *New Engl J Med*, 218 : 884, 1938 (Quoted by 14).

Announcement . . .

International Congress of Dermatology

The XVI International Congress of Dermatology will be held in Tokyo, Japan, May 23 to 28, 1982. The Congress includes a scientific program (special lectures, case presentations, advances in dermatology, symposia, courses, workshops, informal discussion groups, free communications, poster communications, Japanese Dermatological Association seminars, and a scientific exhibition) and social events (performance of traditional Japanese Kabuki drama, a concert with a world-famous conductor, a short suburban sightseeing tour, and programs for accompanying persons). The Congress site is the Hotel New Otani, Tokyo's prestige hotel which has been the site of many international congresses. English, French, Spanish, German and Japanese may be used in the Congress, and simultaneous interpretation will be provided during the main educational sessions.

The First Circular including detailed information regarding registration, hotel accommodations and group travel is now available on request to :

Prof. Makoto Seiji, M.D., Secretary General, the XIV International Congress of Dermatology, C.P.O. Box 1560, Tokyo 100-91, Japan.

All interested persons are cordially invited to participate in the Congress.

(Contd. P. 58)