# CALCULUS IN THE URETHRAL DIVERTICULUM

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## INTRODUCTION

Although urethral calculi are said to be rare in the western hemisphere, they occur fairly commonly in developing countries. However, calculus occurring in urethral diverticulum is rare. A case of diverticulum of urethra with calculus is reported in an 18-year old male.

#### CASE REPORT

An eighteen years old male, presented with difficulty in micturition, frequency and dysuria of 6-month duration. In the past he had suffered twice from retention urine, first time in childhood which was relieved after circumcision and second time 8-months back when he was admitted to a hospital in Kabul where bougies were passed and retention relieved.

On examination, a young fit boy with a hard and smooth swelling, about 1.5 cm, under the surface of urethra in peno-scrotal region was seen.

The results of laboratory tests were as follow: Haemoglobin 15.0 g/dl; TLC 8,700/cm; urine examination revealed 8-10 pus cells/HPF.

Chest X-ray was normal. I.V.U was normal, Plain X-ray pelvis revealed 2 opacities in the soft tissue shadow of penis and scrotum. (Fig. 1)

Retrograde urethrography revealed the opacities to be out side the urethra. (Fig. 2)

The calculus was removed through an incision on the ventral surface in penoscrotal region. The diverticulum along with the stone was removed without any damage to the urethra, the catheter was left in situ for 5-days with antibiotic cover. His post-operative course was uneventful. (Fig. 3)

### DISCUSSION

Male urethral stone is a rare entity in western part of the world yet it continues to be common in developing countries but stone in urethral diverticulum is quite rare. Primary calculus of the urethra is rare and usually occurs in congenital diverticulum. In our case the symptoms started in childhood and so we consider it to be a congenital diverticulum. According to Suter (1908) & Johnson (1923) as quoted by Sinha & Rintoul, a diverticulum arises from the congenital dilatation of the periurethral cystic ducts which form a series of disconnected tubules parallel to the urethra on the ventral side, and by their enlargement, form diverticula. Stone in urethral diverticulum have been reported by various authors<sup>3,2,4,</sup> Cases have also been reported for calculi in female urethral diverticulum.5,6

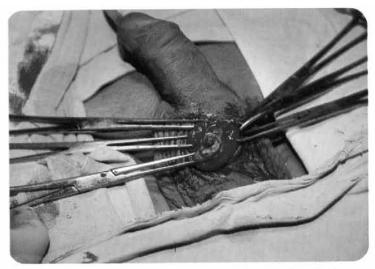


Fig: 1. Retrograde Urethrogram showing the calculus shadow out side the urethra.





Fig: 2. Showing plain radiograph of pelvis, Fig: 3. Operative field showing calculus in radio-opaque shadow can be seen in peno-scrotal scft tissue shadow.

the Urethral diverticulum.

The operative management of the diverticular calculi has been the same in all reported cases i.e diverticulectomy along with removal of the stone. No urinary diversion was required in the case reported, though it may be needed in some cases.<sup>7</sup>

## REFERENCES

- Sinha A, Rintoul RF. Giant calculus in urthral diverticulum. Br J Urol 1982; 54: 62.
- Sharfi AR. Presentation and management of Urethral Calculi. Br J Urol. 1991; 68: 271.

- Koga S, Arakaki Y, Matsuoka M, Ohyama C. Urethral Calculi. Br J Urol. 1990; 65: 288.
- Amin HA. Urethral Calculi. Br J Urol. 1873; 45: 192.
- Hansen BJ, Horby J, Brynitz S, Berg JS. Calculi in female urethral diverticulum. Int Urol Nephrol, 1989; 21 (6): 617.
- Gaur DD."Zig Zig Chug Chug"- A New Urological Symptom A case report. Br J Urol 1992; 356: 196.
- 7. Khinev A, Gochev D, Ralichkova L. A case of congenital diverticulum of urethra combined with calculosis. Khirurgiia-(Sofia), 1991; 44(2): 57.