

# Giant anterior urethral calculus presenting with periurethral abscess: a case report

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## Citation

M Zea, A Anees. *Giant anterior urethral calculus presenting with periurethral abscess: a case report*. The Internet Journal of Tropical Medicine. 2009 Volume 6 Number 2.

## Abstract

This is a case report of a 45 year old mentally retarded patient presented with a large urethral calculus (5.5cm×4cm×4cm) impacted in bulbar urethra complicated with periurethral abscess and retention of urine. The periurethral abscess was drained and urinary diversion was done by suprapubic cystostomy. The stone was extracted later on by open urethrotomy.

## INTRODUCTION

Urethral calculi represent less than 2% of all urinary stones. It usually develops in the presence of diverticula or infection<sup>1</sup>. This is a case of a mentally retarded patient presenting with severe perineal sepsis due to a giant calculus impacted in the bulbar urethral fossa.

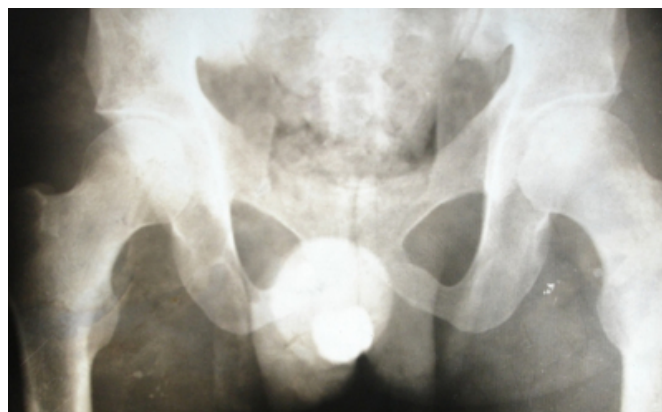
## CASE REPORT

A 45 year old patient was presented in emergency at afternoon with complaints of swelling over scrotum extending up to penis and inability to pass urine since last night. The patient was mentally retarded since childhood. The patient was dehydrated and having high grade fever. The patient's relatives did not give history of previous trauma or retention.

On examination fluctuant swelling was present in perineum with surrounding induration. Plane X ray pelvis shows a large calculus in bulbar urethra.

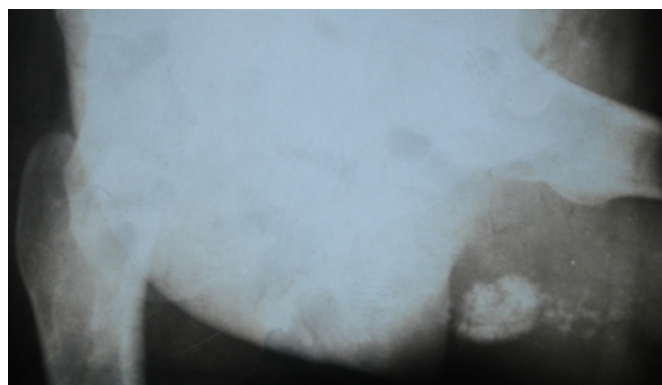
## Figure 1

Fig.1. X ray pelvis showing large urethral calculus with surrounding edema



## Figure 2

Fig.2. Lateral view showing elongated calculus with irregular calcification

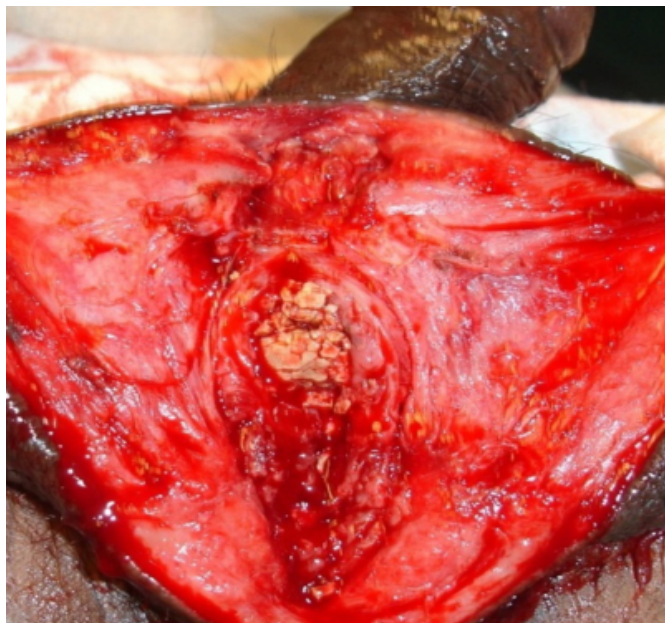


Incision and drainage of abscess was done along with suprapubic cystostomy to divert urinary flow. The patient

was kept on antibiotic according to sensitivity. After 7 days when general condition of patient and local wound was improved, open urethrotomy was done under epidural anaesthesia and the stone was extracted. The stone was measuring 5.5cm×4cm×4cm and weighing 58 grams. Urethra was repaired in three layers over a Foley's catheter. The Foleys was removed after 14 days. The postoperative period was uneventful.

### Figure 3

Fig.3. Per-operative photograph showing impacted calculus



### DISCUSSION

Urethral calculus is a rare clinical entity occurs more in males because of short urethra and low rate of bladder calculi among females<sup>1</sup>.

Urethral calculi can be classified as either native or migrant. Native or primary calculi form de novo in association with urethral abnormality causing stasis and infection. These

abnormalities are stricture, diverticula, foreign body, after urethroplasty with hair bearing skin<sup>2</sup>. Majority of urethral calculi in males are migrant or secondary formed in upper urinary tract<sup>3</sup>.

Urethral calculi are mainly composed of struvite, calcium phosphate, or calcium carbonate. Native stones do not cause acute symptoms, while migrant stones may present as acute retention, dysuria, dribbling, or sometimes sepsis in the presence of infection<sup>4</sup>. Urethral calculi are usually small, bigger calculi described in earlier literatures are usually found in prostatic urethra<sup>5</sup>.

Treatment is contingent on the size and location of the calculus and condition of the urethra. Acute retention should be treated by suprapubic diversion of urine. Anterior urethral calculus can be managed by judicious use of xylocain with milking or forceps removal. Impacted anterior calculus can be removed by meatotomy or urethrosopic methods. Posterior urethral calculus can be treated in situ or pushed back into bladder and treated as bladder calculi<sup>2</sup>. Large chronic calculus should removed by external urethrotomy with two layer closure of urethra<sup>6</sup>.

### References

1. Suzuki Y, Ishigooka M, Hayami S, Nakada T, Mitobe K. A case of primary giant calculus in female urethra. *International Journal of Urology and Nephrology* 1997; 29: 237-9
2. Ho K V, Segura J W, Lower urinary tract calculi, In Wein A J, Campbell-Walsh Urology. 9th ed. Saunders, Philadelphia 2007; 3: 2670-2
3. TV Shanmugam, V Dhanapal, T Rajaraman, CPM Chandrasekar, K Pitchai Balashanmugam. Giant urethral calculi. *Hospital Medicine*, 2000; 61(8): 582
4. Deodhar SD, Khope SS. Giant prostatic urethral calculus (A case report). *J Postgrad Med*, 1983; 29:49-50.
5. Win T Giant urethral calculus. *Singapore Med J*.1994; 35:414-415
6. P. Lubana, O. Singh, S. Gupta, S. Odiya & R. K. Mathur: A Rare Case Of A Giant Urethral Calculus . *The Internet Journal of Surgery*. 2008 Volume 14 Number 2

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