

Calculi in a Female Urethral Diverticulum

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ABSTRACT

Urinary stones are rarely seen in the urethra and usually encountered in men with urethra stricture (or) diverticulum. The case of a 52 years old women presented, who consulted for a weak stream associated with repeated urinary infections. The diverticulum was approached via vaginal route and the extraction was successful. The patient has been well, with no dysuria dyspareunia, incontinence for 2 months follow up.

Keywords: Urethral diverticulum , calculus, female.

INTRODUCTION

Urethral diverticulum is commonly found in women, but the presence of urethral stone is rare. It could sometimes be found in men. With tortuous urethra or with diverticulum. Because of a short urethra and the low probability of formation of bladder stones, this pathology is even much rare in women. We report a case of female urethral diverticulum with stone.

CASE REPORT

A 52 years old woman presented to our department with a two years history of recurrent urinary infections, patient also complained of lower abdominal pain, dysuria and dyspareunia. She was on no home medications we decided to have further evaluation considering her recurrent infections on pelvic examination, leakage of purulent discharge from orifice was noted. Cystoscopy showed 2 orifices of diverticulum. Spinal anaesthesia was used for surgery before initiating the procedure 18 fr Foleys catheter kept 2 cm incision was made on median

vaginal wall. Diverticulectomy and stone was extracted three layer closure was done.

DISCUSSION

Dysuria dyspareunia and post void dribbling are the classic symptoms suggestive of urethral diverticulum but it frequently go undetected in women however a diverticulum should be suspected in patients with recurrent urinary tract infection because immediate diagnosis and appropriate treatment are important for this disease.

The reported incidence of urethral diverticulum in adult women in between 0.6% and 6% and associated stone formation is reported in 1.5-10% ^[1] of cases. Urethral calculi are rare and generally more common in men with urethral stricture (or) diverticulum. The quality of life of patient who have diverticulum (especially with calculi) may be significantly disturbed because of complications such as mass effect, incontinence, pain and urinary tract infection.



Figure: 1 Projection of urethral diverticulum with calculus seen through anterior vaginal wall.

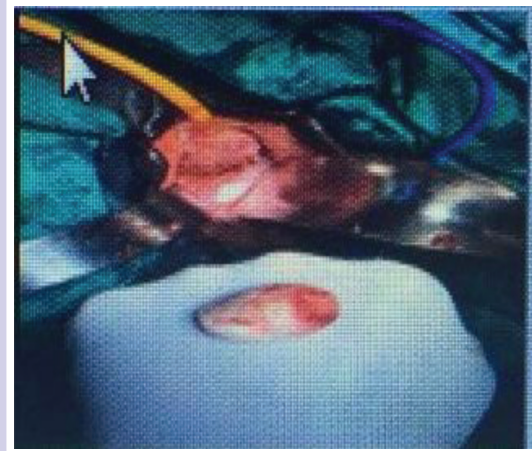


Figure: 2 Calculus after incision through anterior vaginal wall

Any patient with lower urinary tract symptoms that have proved to be unresponsive to traditional treatment should be suspected of having an urethral diverticulum. [1,2,3] Inflammation, calculus formation and neoplastic degeneration are the main complications of untreated diverticulum. Stasis of infected urine with deposition of salts and occasional mucoid desquamation of the epithelial lining is known to be casual factor for stone formation.[6] These stones are mostly magnesium ammonium phosphate (or) calcium carbonate.

Urethral calculi are generally classified as native (those formed in urethra) or migratory (those formed in bladder (or) kidney with secondary descent) migratory calculus are at least 10 times more common than native calculi (4,5). Most native calculus form in association with chronic stasis and urinary infection either with in a urethral diverticulum or proximal to urethra obstruction.[7,8]

Single most important diagnostic indication of a calculus in diverticulum is finding of palpable mass on floor of urethra.[6] Cysto urethrogram is important in confirming presence of urethral diverticulum. CT and MRI can be good alternative choice. Anterior urethral stones cause dysuria & may be confirmed by palpation on the other hand. Posterior urethral calculi may produce pain referred to rectum (or) perineum.[4]

Conservative therapy offered symptomatic relief in most cases but did not prevent recurrent symptoms. So we believe that satisfactory long term treatment of diverticulum is achieved successfully by surgical excision.

Confirming of number, site, size, of diverticulum is important before operation of prevent complications such as urethral stricture, urethrovaginal fistula & in continence due to injury of sphincter.

CONFLICT OF INTEREST :

The authors declared no conflict of interest.

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