Case Report

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Primary Giant Calculus in Urethral Diverticulum

Y.		Ginesin
M.		Bolkier
J.		Nachmias
D.R.	Richter	Levin

Department of Urology, Rambam Medical Center, School of Medicine, Hateron Haifa, Israel

Key Words

Primary calculus
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Abstract

Urethral stone is a rare clinical entity and usually encountered in men with urethral stricture or diverticulum. They are exceedingly rare in females secondary to the low incidence of vesical calculi and short urethra. We report a very rare case of a primary giant calculus in a urethral diverticulum of a female.

Dr. Y. Ginesin, Department of Urology Rambam Medical Center, School of Medicine, Hateron Haifa, (Israel)

Case Report

A 73-year-old female was referred to our outpatient clinic by her family physician for investigation of recurrent urinary tract infections that did not respond to antibiotic therapy. In her past history she complained of dysuria, urgency and frequency of micturition for many years, but did not ask for medical advice.

She denied any history of abdominal or flank pain. Her sexual life was normal. On physical examination, no abnormalities were found except for a large hard lump, 3 X 4 cm in size, palpated on the anterior vaginal wall. The results of laboratory tests were in the normal range except for urine culture that showed a profuse growth of *Escherichia coli* and *Pseudomonas pyocyanea*.

A plain X-ray of the lower abdomen revealed a large calcification suspected to be a urethral stone (fig. 1). Cystourethroscopy showed a wide necked diverticulum on the anterior wall of the urethra with a large stone impacted in it.

The patient refrained from surgical therapy.

Comment

Urethral calculi are very rare and generally more common in men with urethral stricture or diverticula [1,2].

The majority of these stones originate in one of the kidneys or urinary bladder, passing to the urethra where they may be lodged in a diverticulum or due to a distal stricture.

Primary stones of the urethra are less frequent [3] and can be found in limited numbers. Their composition is

in general different from stones migrating from the upper urinary tract, while the former is composed usually of magnesium ammonium phosphate, the others are composed usually of calcium oxalate and phosphate. Usually, the stones that are located in a diverticulum

Fig. 1. A plain X-ray of the pelvis shows a large calcification.

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cause recurrent urinary tract infections, and unless stricture of the urethra exists distally, there is no previous history of urine outflow disorders. Urethral calculi are extremely rare in females [4]. Amin [5] described a large series of 86 cases of urethral stones which were found only in men. In our case report, two rare entities were gathered: a stone that developed in a female urethra and as to the ethiology it seems to us that the stone was formed primarily in the urethral diverticulum.

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