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ANTERIOR URETHRAL VALVE ASSOCIATED WITH POSTERIOR URETHRAL VALVE

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ABSTRACT

A rare case of anterior urethral valve in association with posterior urethral valuve is reported. Clinical findings are discussed, and the available literature will be briefly reviewed.
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INTRODUCTION

Anterior urethral valve is a rare anomaly and in nearly all cases, is actually a congenital urethral diverticulum which expands and balloons ventrally.[1]

Its association with posterior urethral valve is very rare and has been reported in less than five cases in the literature.

Case Report

An 18 month old male infant with a history of urinary tract infection and right upper caliceal clubbing on IVP was referred to our department by a pediatrician. There was a previous history of scrotal bulging during voiding, and revoiding after compression of the bulged scrotum. Physical examination showed bulging in the posterior aspect of the scrotum with consequent urination upon compressing it. VCUG revealed a large urethral diverticulum (Fig. 1-a,b).

Direct urethroscopy under general anesthesia showed a thin web in the bulbar urethra with a small distal orifice measuring the same as the sheath of a number 13 cystoscope. In continuation with the orifice was a large diverticulum, the filling of which with fluid resulted in scrotal bulging.

After the membranous urethra a posterior valve (Young type 1) was present, and the portion posterior to the verumontanum was dilated. The mucosa of the bladder was finely trabeculated (grade 1).

The patient underwent general anesthesia in the lithotomy position. A midline incision was made on the bulging scrotal area. The diverticulum and the posterior valve were both resected. The urethral defect was repaired with multiple supporting layers and the skin sutured. A fenestrated stent

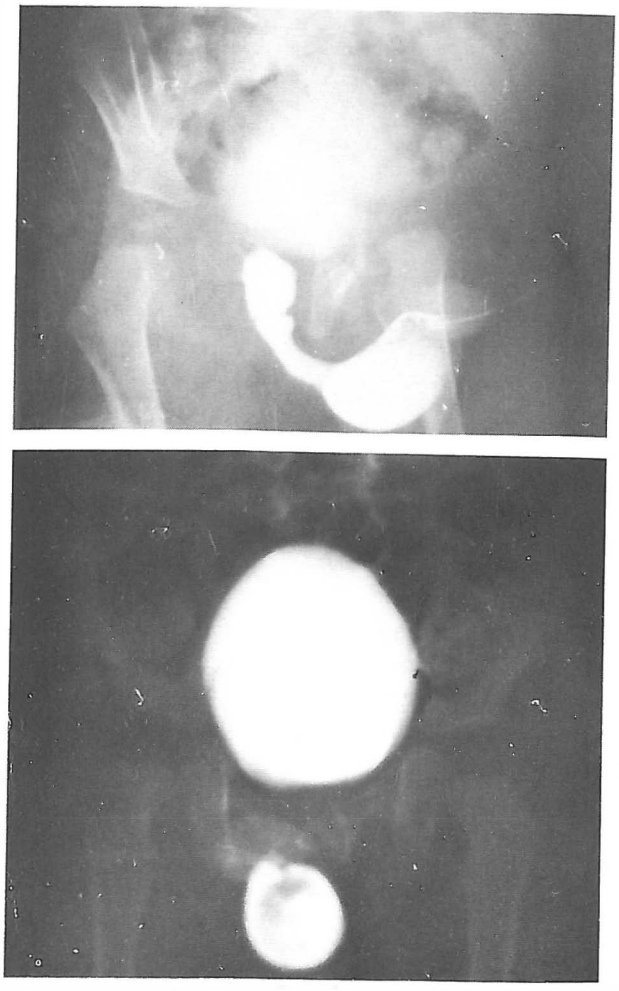

Fig. 1-a,b. VCUG of the patient showing a urethral diverticulum.

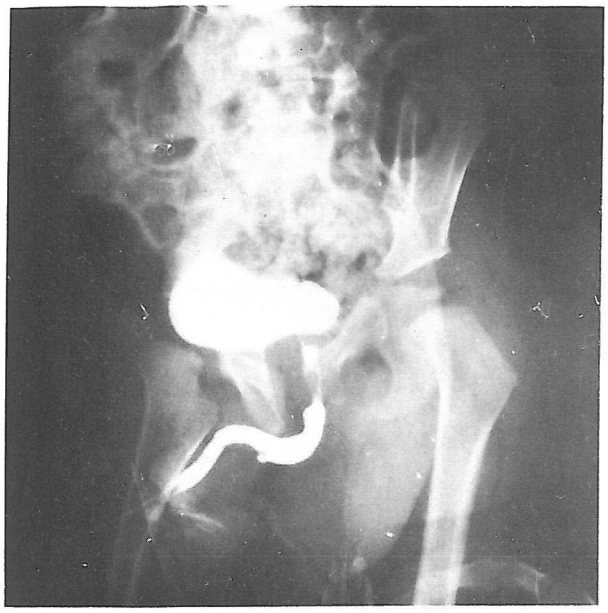

Fig. 2. Urethrography revealing a small diverticulum.

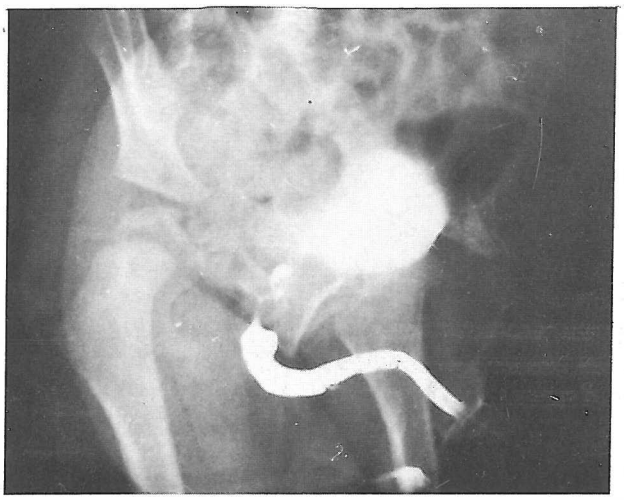

Fig. 3. Urethrography one month after Fig. 2. No evidence of the previous diverticulum exists.

was placed in the urethral meatus. After 1 week the stent was removed. Urethrography showed a small diverticulum. In the next urethrography performed 1 month later there was no evidence of the diverticulum (Figs. 2, 3) and the patient was discharged.

DISCUSSION

In a review of the literature, during a 29- year period (from 1965 to 1994) only three cases of concomitant anterior and posterior urethral valves have been reported. All of the reported cases have been treated with vesicostomy.[3] These disorders may cause vesicoureteral reflux,[4,5] hydronephrosis,[3-6] difficult urination,[7] enuresis,[2] recurrent high fever[4] and occasionally renal failure. Management of anterior urethral valves is similar to the more commonly seen posterior urethral valve and includes urethral catheterization, suprapubic cystostomy, vesicostomy, loop urethrostomy, open resection of the diverticulum and endoscopic resection.[1]

Our case was treated by open resection of the anterior urethral valve and endoscopic resection of the posterior one.

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