Picture Story

Two cases of congenital anterior urethral diverticulae

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Two cases of congenital anterior urethral diverticulae are presented.

Case 1

A 4 month old boy presented with swelling of the ventral aspect of the penis during micturation since birth. There was no history of dysuria, poor stream or febrile urinary tract infection (UTI). He had a ritual circumcision at the age of 1 month. Findings on systemic clinical examination were normal. Urinalysis, blood counts and serum creatinine were within normal limits. Locally, there was swelling on the ventral aspect of the penis with increase in size during micturation. Ultrasonography (USG) showed normal upper tracts. Micturating cystourethrogram (MCUG) showed a large diverticulum making an acute angle with the floor of urethra (Figure 1). Cystoscopy was normal. The diverticulum was excised and urethroplasty was done (Figures 2 & 3). Convalescence was uneventful with no complications during follow up. Postoperative MCUG showed near normal appearance of urethra (Figure 4).

Figure 1: Pre-operative MCUG

Figure 2: Diverticulectomy being performed

Figure 3: Urethroplasty completed

Figure 4: Post-operative MCUG

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Case 2

A 20 day old neonate presented with swelling of the ventral aspect of the penis and dribbling of urine since birth. There was a history of antenatally diagnosed bilateral hydronephrosis. The bladder was palpable. The patient had raised serum creatinine, dyselectrolytaemia, acidosis and UTI. USG showed back pressure changes. MCUG showed a large diverticulum at the penoscrotal junction (Figure 5). Cystoscopy was normal. Open diverticulectomy with urethroplasty was done (Figures 6 & 7). Post-operative MCUG showed near normal appearance of the urethra and no back pressure changes (Figure 5). The patient had a good urinary stream (Figure 8) and an uneventful 2 month follow up.

Figure 5: Pre and Post-operative MCUGs

Figure 6: diverticulum exposed

Figure 7: Urethroplasty being performed

Figure 8: Post-operative urinary stream

Discussion

Anterior urethral diverticulae with or without valves are rare congenital anomalies causing lower urinary tract obstruction in children¹. They typically occur where there is a defect in the corpus spongiosum, leaving a thin-walled urethra. This segment of the urethra balloons out during voiding, simulating a mass that is sometimes visible along the ventral wall of the penis. The swelling is fluctuant and urine dribbles from the meatus on compression¹. The diagnosis is easily established by MCUG. They are best managed by open excision and urethroplasty¹.

References:

1. Rawat J, Khan TR, Singh S, Maletha M, Kureel S. Congenital anterior urethral valves and diverticula: Diagnosis and management in six cases. *African Journal of Paediatric Surgery* 2009; 6(2): 102-5.