Congenital scaphoid megalourethra associated with posterior urethral valve: A case report

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ABSTRACT

Congenital scaphoid megalourethra is a very rare congenital anomaly of the anterior urethra in males. Here, a case of scaphoid megalourethra and posterior urethral valves is presented. A one and half year old male child came to us with complaints of ballooning at the tip of penis since birth. Micturating cystourethrogram showed a dilated glanular urethra. The patient underwent a Nesbitt’s longitudinal reduction urethroplasty with a single-staged, single layered repair. Post-operatively, the child passed a healthy stream of urine without straining.

Keywords: Megalourethra; urethral anomalies; valves; Nesbitt’s reduction urethroplasty,
normal. Micturating cystourethrogram showed a large, dilated glanular urethra [Fig. 2].

Fig. 1. Clinical photograph.

Fig. 2. Micturating cystourethrogram.

Patient underwent a cystoscopy, which was found to be normal. There were no residual valves present.

A Nesbitt’s longitudinal reduction urethroplasty with single layered single staged repair was done [4] [Fig. 3,4]. A 7Fr infant feeding tube was kept as a urethral stent and removed on post-operative day 10. Patient passed urine in a healthy, single stream.

Fig. 3. Reduction urethroplasty.

Fig. 4. Single layered repair.

Discussion

Congenital megalourethra is a rare anomaly involving the male anterior urethra. The exact cause is not clearly known but is believed to be due to a defect in migration, differentiation or development of mesenchymal tissues of the phallus or due to delayed canalization of granular urethra associated with maldeveloped corporal tissues [5]. Poor development of erectile tissues causes urinary stasis and dribbling [6].

There are two types of congenital megalourethra- scaphoid and fusiform. Scaphoid is the more common and milder form. It involves only the corpus spongiosum of anterior/ penile urethra. Fusiform type is the rarer and more severe form involving a relatively long segment of corpus spongiosum and corpora cavernosa of the anterior urethra.
100% of fusiform type and around 80% of scaphoid type are associated with urological anomalies [1,8]. The commonly associated anomalies are renal dysplasia-hypoplasia, hydronephrosis, hydroureter, vesicoureteral reflux, prune-belly syndrome, urethral duplication, megacystis, hypospadias, posterior urethral valves, and undescended testes. Other system anomalies including VATER (vertebral, anal atresia, tracheoesophageal fistula, and renal anomalies) and VACTERL (vertebral, anal atresia, cardiac, tracheoesophageal fistula, renal, and limb deformities) are described [9].

Our patient was a one and half year old male child having scaphoid megalourethra associated with posterior urethral valves. There was no other renal system anomaly found. A Nesbitt’s longitudinal reduction urethroplasty was done with repair being done in a single layer and single stage. No local tissue cover was used as intermediate layer before skin closure. Urethra was stented for 10 days with 7 Fr infant feeding tube and removed. Patient passed urine in a single, healthy stream without dribbling or straining.

Compliance with ethical statements
Conflicts of Interest: None.
Financial disclosure: None.
Consent: Written informed consent was obtained from the parent of the patient.

References