Congenital megalourethra

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A 3-day-old boy with an antenatal diagnosis of hydronephrosis and a cyst at the tip of the penis was referred for imaging evaluation. At birth, he exhibited an enlarged phallus and cryptorchidism, and was in renal failure. Renal US demonstrated bilateral renal dysplasia. Voiding cystourethrogram (VCUG) revealed severe vesicoureteral reflux into the ureters with mild dilatation of the pelvicaliceal system, a nontrabeculated bladder (Fig. 1), and an elongated urethra with focal ventral dilatation (Fig. 2, arrow), corresponding to the penile cyst identified prenatally. Radiologic diagnosis of scaphoid megalourethra without posterior urethral valves was con-

Fig. 1 VCUG with severe reflux

Fig. 2 Elongated urethra with focal ventral dilatation

firmed on cystourethroscopy. Although initially suspected, the child did not have prune belly syndrome.

Classified as either scaphoid/focal or fusiform/diffuse types, megalourethra is characterized by dilatation of the urethra without distal obstruction [1, 2]. Resulting from a developmental mesodermal defect, patients with megalourethra have absence of the corpora cavernosa and spongiosum with varying degrees of voiding and erectile dysfunction.

Megalourethra is almost universally associated with other malformations (urogenital anomalies, prune belly syndrome, and VATER association) and when diagnosed, radiologic evaluation for other anomalies is mandatory.

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