CASE REPORT

PEDIATRIC UROLOGY

Congenital giant hydroureter presenting as abdominal mass in an infant

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Herein we present a case of a 7-month-old baby girl, with left single system ectopic ureter, in whom the ureter was dilated to such an extent that it presented as an abdominal mass. Diagnosis was established by means of computed tomography. Work up was completed with renal scan and micturating cystourethrography. The patient was operated and left nephroureterectomy was performed. Hydroureter has to be considered in differential diagnosis of abdominal mass in an infant.

Key Words: ectopic ureter ♦ giant hydroureter ♦ abdominal mass

CASE REPORT

A 7-month-old baby girl was brought to our hospital with a 2 months history of an ill defined mass involving entire abdomen. There were no urinary complaints. Contrast enhanced computed tomography (CECT) of the abdomen and pelvis revealed a small left kidney with a dilated renal pelvis that continued as a hugely dilated and tortuous ureter (Figure 1). On a diethylene triamine pentaacetic acid (DTPA) scan split function of the left kidney was 5%. Micturating cystourethrogram (MCU) showed no reflux, with the bladder pushed laterally, probably due to the mass effect of the dilated ureter (Figure 2). On cystoscopy, hemitrigone was noticed, with absent left ureteric orifice. A diagnosis of left ectopic ureter with congenital giant hydroureter and poorly functioning left kidney was made and open nephroureterectomy was done (Figure 3). Intra-operatively the left ureter was found terminating into the vagina.

DISCUSSION

This case has been presented to highlight the extent to which a ureter can dilate. In case of congenital

Figure 1. CT scans with a small left kidney, an extremely dilated left ureter and a displaced bladder.

giant hydroureter the ureter is dilated out of proportion to the kidney, which is usually small and atrophic [1]. Very few such cases have been reported in literature [2, 3, 4] and surgeons should be aware of this entity as one of the causes of abdominal mass in an infant.

Figure 2. Micturating cystourethrogram showing the displaced bladder, relaxed urethra and no sign of reflux.

Figure 3. Specimen consisting of the left kidney and its ureter.

References

1. Lelli-Chiesa P, Cupaioli M, Rossi C, Dòmini M, Angelone A. Congenital giant megaureter: first neonatal case. J Pediatr Surg. 2001; 36: 944–945.
2. Venkatesh M, Annigeri, Harihar V, Hegde, Preetam B, Patil, Anil B, Halgeri, and P.
3. Raghavendra Rao. Congenital giant megaureter with duplex kidney presenting as abdominal lump in a neonate. J Indian Assoc Pediatr Surg. 2012; 17: 168–170.
4. Uson AC, Womack CE, Berdon WE. Giant ectopic ureter presenting as an abdominal mass in a newborn infant. J Pediatr. 1972; 80: 473–476.
5. Huang CJ. Congenital giant megaureter. J Pediatr Surg. 1987; 22: 235–239. ■