A Case of Large Abdominal Cyst with Diagnosis of Crossed Fused Ectopic Kidney with Severe UPJ Obstruction

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R.S.

- 5 y.o. girl referred to pediatric urology clinic for assessment and management of cystic abdominal mass
- Adopted from India
- Known absent left kidney
HPI

• PMH
  – Absent left kidney
  – Ectopic anus (repaired at one week of life)
  – Bilateral radial hypoplasia with contracted hands
  – VACTERL association

• Birth history
  – Unknown due to adoption
MRI

F. OUTSIDE FILMS ABD/PELVIS
O.R

- Cystourethroscopy with right retrograde pyelogram
  - No left ureteral orifice found cystoscopically within urethra or vagina
  - Gaping right ureteral orifice easily annulated
  - Right retrograde pyelogram: no duplication, no filling defects, no hydronephrosis, malrotation of right kidney

- Robotic-assisted laparoscopic partial nephrectomy
Operative Findings

- Aberrant vessel
- Atretic ureter
- Healthy right kidney
- Dilated cystic mass/presumed crossed fused ectopic kidney
Post operative Course

• Patient discharged on POD1
• Pathology consistent with dysplastic renal tissue
• Returned to clinic 4 weeks after surgery
• No major events since surgery
• Repeat renal ultrasound performed
Renal US

LOWER POLE
Follow up Visit

- 10 month follow up with renal ultrasound
- No acute events
Renal US

right inferior pole

? isthmic remnant
Crossed Fused Ectopic Kidney

- Rare congenital malformation
- Second most common fusion anomaly after horseshoe kidney
- Both kidneys are located on same side and may occur with fusion (90%), without fusion (<10%), or rarely may be solitary or bilateral
- Left kidney three times more likely to migrate to right
- Ureters from each kidney are usually orthotopic
- Renal ectopia is from failure of normal ascent of embryonic kidney
Crossed Fused Ectopic Kidney

- Symptomatic patients can be associated with range of urological problem
  - Ureteropelvic junction obstruction
  - Vesicoureteric reflux
  - Ureteric strictures
  - Renal dysplasia
- Aberrant arteries can cause hydronephrosis
- Treatment is guided by urological abnormalities that are symptomatic or cause loss of renal function
References

