

An Unusual Abdominal Mass

By

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Case Report

- 8-month-old male patient born with an anorectal malformation, s/p colostomy as a newborn.
- Presented with fever for 6 days, abdominal distention, and bilious emesis.
- No colostomy output for 3 days.

Clinical Examination

- Malnourished, pale, and dehydrated.
- Marked abdominal distension with tenderness in the left lower abdomen.
- Loop colostomy (**high ARM**).
It was done by a general surgeon in a primary hospital
- Perineal hypospadias
- Bilateral cryptorchidism



Past history

- Recurrent attacks of fever of unexplained origin for 6 months.
- Multiple hospital admissions in the pediatric ward (no definitive diagnosis)

Lab results

- **Normal** urine analysis.
- High leucocyte count ($11.7 \times 10^9/L$).
- High (CRP, 79.7mg/l).
- Normal blood urea and serum creatinine.

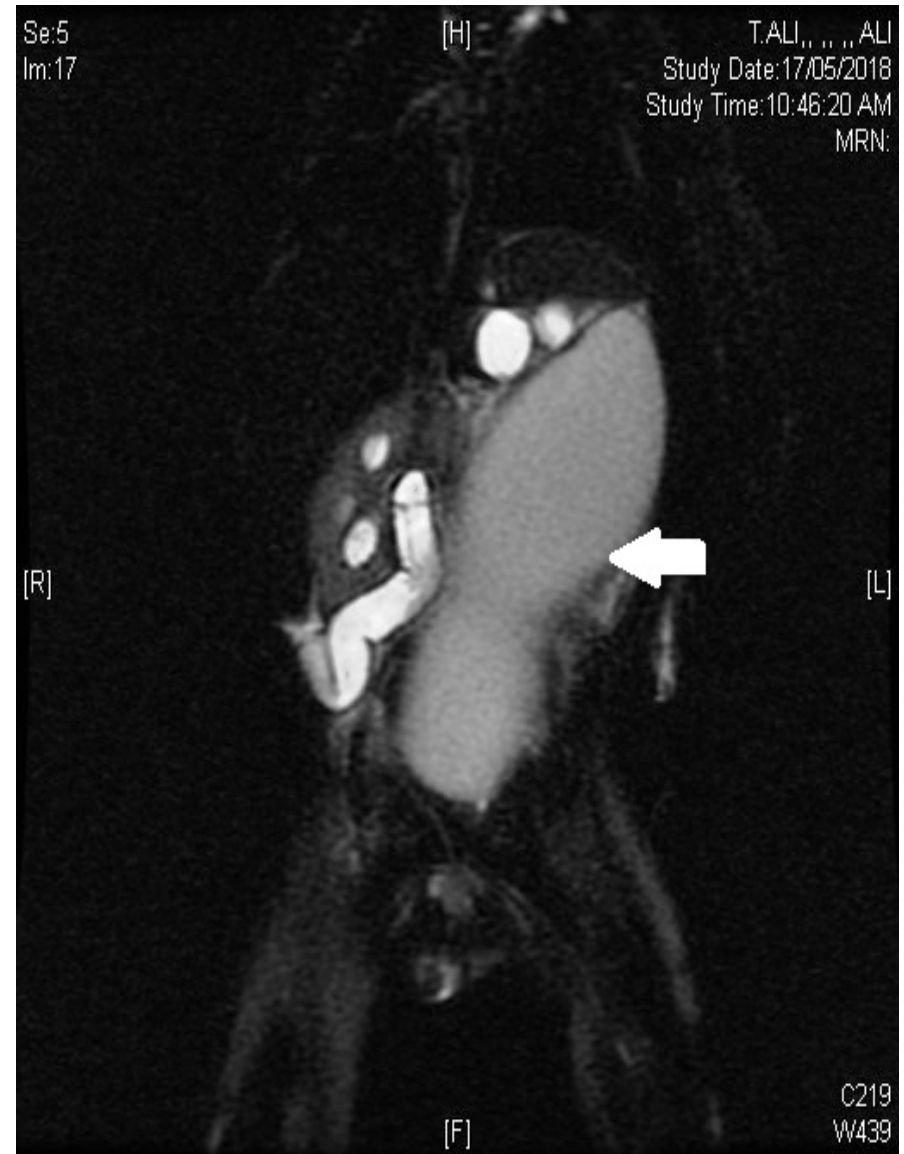
Abdominal US

- Cystic lesion (12 x 6 x 7cm) extending from the pelvis to the upper abdomen
- Both kidneys with increased echogenicity.
Moderate hydronephrosis.

Loopogram



CT with upper GIT contrast



Poll Q1

Q What is your provisional diagnosis ?

Differential diagnosis:

A- GIT duplication cyst.

B- Anterior meningocele

C- Mesenteric cyst.

D- Omental cyst.

E- Something else.

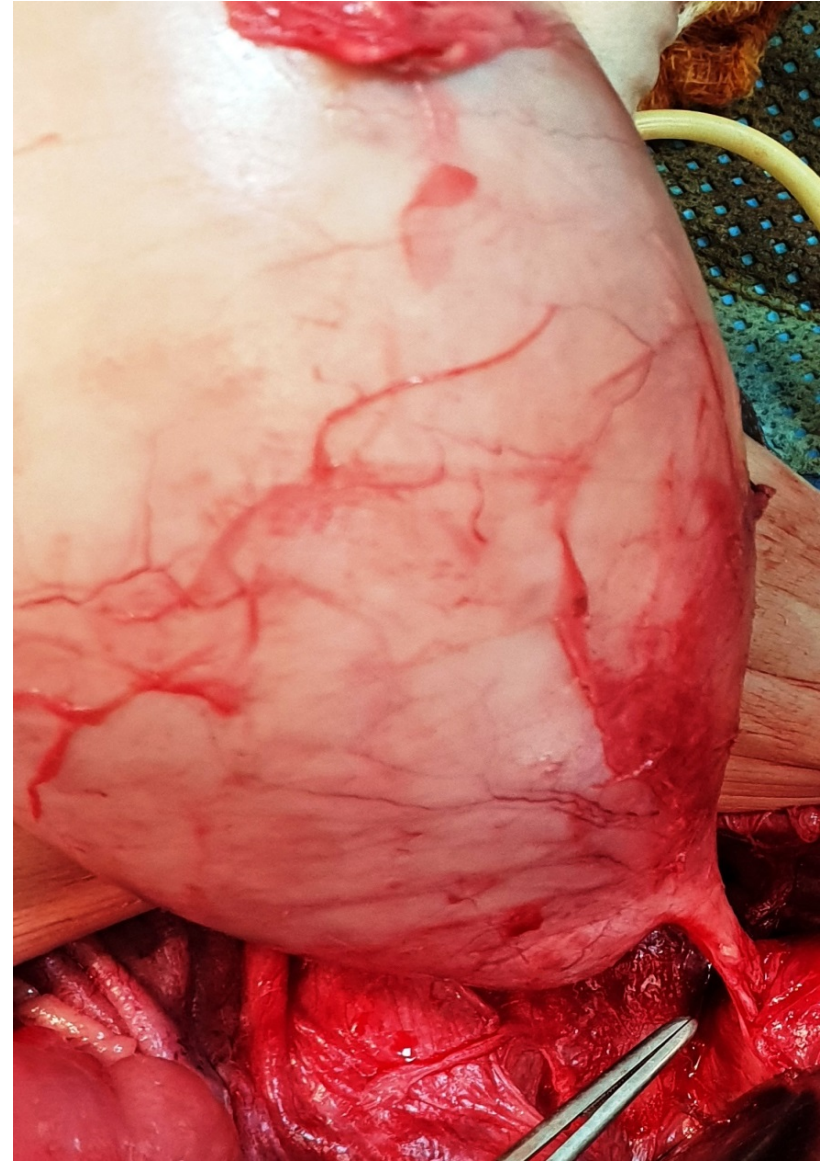
F- I don't know.

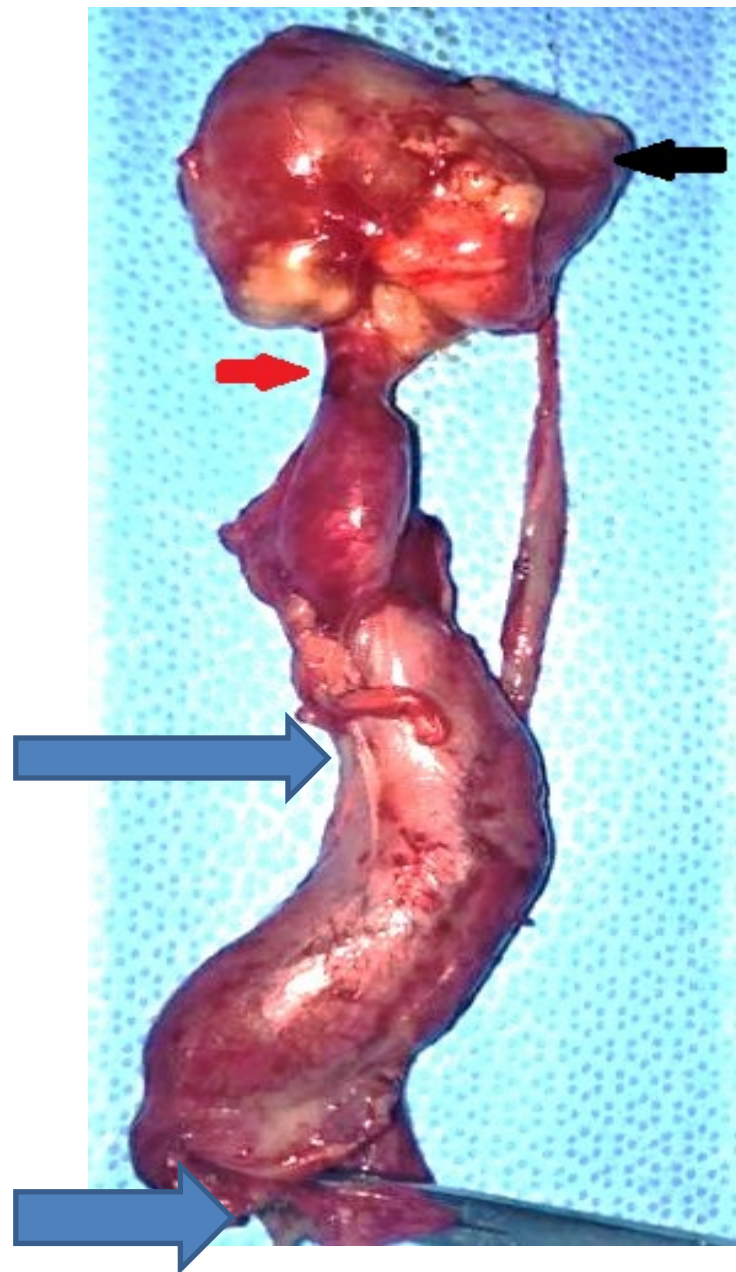
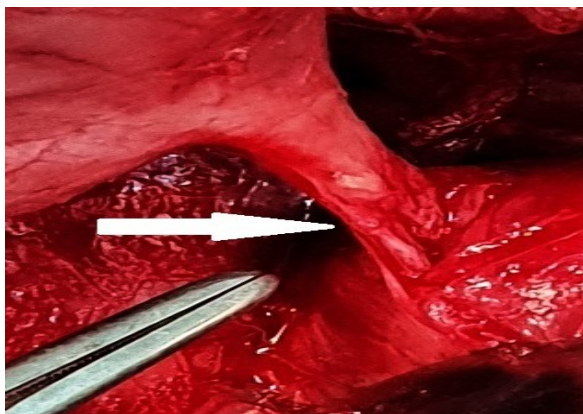
Operative findings

Fig. 1



Fig. 2





Poll Q2

What is the proper surgical approach?

- A- Ureterostomy.
- B- Nephrostomy.
- C- Nephroureterectomy.
- D- I don't know.

Surgical decision

1. The other kidney...looks healthy with normal kidney function.
2. The ipsilateral kidney....hypoplastic, full of pus (pyelophrosis)
3. Hypoplastic renal vessels.
4. The distal part of the ureter is atretic.
5. The diseased ureteric segment.... markedly distended and mostly it will not recoil

Second opinion



Left nephro-ureterectomy was done.

Histopathology

- **The ureteric cyst** showed..... dysplastic & disorganized muscle coat, lined with columnar epithelial mucosa, rather than the usual transitional epithelium



segmental dilatation of the ureter




Ureteric cyst

- **Kidney**....xanthogranulomatous pyelonephritis

Congenital segmental dilatation of ureter



- Rare in children.
- Only 12 case reports are found in the research literature.

- Characterized by a **giant, focal** segmental dilatation of the **mid** ureter  ureteric cyst formation.
- The ureter showed dysplastic & disorganized muscle coat, **lined with columnar epithelial mucosa, rather than the usual transitional epithelium.**

- The distal ureter may be normal, stenotic, or atretic.
- Kidney.... megacalycosis, duplication of collecting system and hypoplastic, dysplastic or nonfunctioning kidney.

Q--What is the differential diagnosis of huge dilatation of the ureter?

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A- Megaureter (1ry, 2ry).

B- Congenital segmental dilatation of the ureter.

Q – What is the proper treatment?

Treatment options *

- Anastomosis of the upper normal ureter (end-to-side) to the contralateral ureter. (advised)
- Excision of the diseased segment with end-to-end uretero-ureterostomy.
- Nephroureterectomy, may be necessary for poorly functioning renal unit.

Poll Q3

Q What is the incidence of occurrence of urinary tract anomalies in association with high anorectal malformation is?

A- 15-20%

B- 50-60%

C- 1-2%

Take-Home Message

- In cases of ARM you have to investigate the urinary system properly before going for surgery (US...after 24-72 hrs)
- The consequences of untreated urinary tract anomalies are more severe than those of ARM itself

- Ureteric cyst should be considered in the diagnosis of any abdominal cystic lesion that occupies a more lateral position, especially in cases showed other anomalies of the urinary system.
- Familiarity with congenital anomalies is important to reach a proper diagnosis and management.

*"Your eyes only see what your
mind suspects"*

Thank you

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