8/30/22 Morning Report with @CPSolvers

Case Presenter: *Ria Dancel (@ria_dancel)* ***Case Discussants***: *Ravi Singh (@rav7ks) and Hans Kaus*

CC: 10y boy w/ 4d of L sided abdominal-pelvic and flank pain

HPI:
No hx of trauma. No fever.
Pain intermittent, then became steady (10/10).
Intractable vomiting due to pain. Normal urination.
Denies: hematuria, constipation, diarrhea, dysuria.

PMH:
Full-term, healthy, immunized. No prior hx of serious illness. No UTIs.

Meds:
Ibuprofen

Fam Hx:
Father - kidney stones
Pat. GM - surgical removal of stones

Soc Hx:
Moved w/ his father from Honduras

Health-Related Behaviors:

Allergies: none

Vitals: **T**: 36.9C **HR**:103 **BP**: **118/75** **RR**: 22 **SpO_2**: fine
Exam:
Gen: growing normally, alert, uncomfortable
HEENT: wnl, moist mucous membranes, no LAD
CV: slightly tachycardic, no murmur or gallops
Pulm: lungs clear
Abd: non distended, L upper and lower quadrant tenderness
Genital: Tanner Stage I, non-tender. Descended scrotums.

Notable Labs & Imaging:
Hematology:
WBC: 14.4 (81% N, 11.7 abs) Hgb: 11 (Hkt 33) Plt: 148
Chemistry:
Na: 140 K: 4.3 Cl:102 CO2: 25 BUN:21 Cr:0.98 glucose: 100
Ca, Phos and Mag: wnl
AST: ALT: Alk-P: T. Bili: Albumin:
UA: 1.02, clear, straw coloured, some ketones, rare mucous, 1 RBC, 1 WBC

Imaging:
EKG:
POCUS: Hydronephrosis b/l, Megaureter b/l, L impacted stone (effect of b/l stenosis or stasis)
CXR:

Final dx: Bilateral ureteral stenosis (anomaly in ureter implantation and posterior urethral valves) w/ subsequent megaureters and hydronephrosis leading to stasis

Problem Representation: A 10yM w/ 4 days of L sided abdominal-pelvic and flank pain (10/10), initially intermittent, now steady w/ vomiting. No fever or trauma noted.

Teaching Points (Debora):
- Abdominal pain left side → trauma (e.g. injury the spleen, kidney), testicules (torsion), infections, renal colic, constipation.
- Time → 4 days (long time). Causes: visceral, vascular or obstruction
- Nauseas, vomiting → GI causes: chronic obstruccion, acute abdomen, pyelonefritis (very painful), volvulus, appendicitis, Meckel diverticulum (can cause intussusception), mesenteric lymphatic adenitis,
- Intussusception: recurrent episodes of abdominal pain w/ pain free intervals between then. Present w/ hematochezia
- History of kidney stones in the family can present with: Struvit-stones due to Infections (e.g. Klebsiella, Pseudomonas), Calciumoxalat (causes: hyperparathyroidism, IBD), Cystine stones (cause: defect in the PCT- transporter) and enlarged peyer patches (can be caused due to recent viral infection or inflammation).
- Labs: Neutrophilia → infection, inflammation. Creatinine 0.98 (high→ red flag)
- Normal kidney: bright hyperechoic area, you don't see the ureter. In the middle of the kidney bright, fat.
- Hydronephrosis: look all connect and polycystic kidney disease: cysts are separated and do not connect