



2/16/26 Mainstream Monday with @CPSolvers



"One life, so many dreams" Case Presenter: Eyrone Case Discussants: Maddy (@MadellenaC) & Saketh Vinjamuri (@saketh_vinj)
<https://clinicalproblemsolving.com/present-a-case/>

Scribing (Sarah B & Riku)
CC: 40 yo F with sudden onset **abdominal pain**
HPI:
 A few hours prior to ED arrival, she began experiencing acute **R sided, mid-abdominal pain**, radiating to her back. It was **10/10** in severity with no alleviating or aggravating factors and no change with positional change. **This has never happened before.**

ROS:
 Denies fevers, chills, chest pain, dyspnea, dysuria, and gross hematuria - LMP 6 days ago

PMH:
 unremarkable

Meds: none

Fam Hx:
 none

Social Hx:
 none

Health-Related Behaviors:
 none

Allergies:
 none

Vitals: T: afebrile HR: 60 BP: 103/78 RR: 20 Sat: 100% on RA

Exam: Gen: in pain with mild distress due to pain
 CV: nl, Pulm: nl, Neuro/Skin/Extremities: unremarkable
 Abd: minimal **right-sided abdominal tenderness**, otherwise no pertinent positives on abdominal exam, no CVA tenderness

Notable Labs & Imaging:

Hematology:
 WBC: 8 Hgb: 13 Plt: nl MCV:nl

Chemistry:
 Na: nl K: nl Cl: nl HCO3: nl Cr: nl BUN: nl Glucose: 185
 AST: nl ALT: nl Alk-P: nl Bili: nl Albumin: nl Total Protein: nl

UA: **+blood** UPT: negative

Imaging:

CT KUB: R sided hydronephrosis, hydroureter, stone visualized
 Uterus nl, no appendicitis

Dx: Kidney stone

Problem Representation: 40 year-old female with acute onset of right-sided abdominal pain, absence of urinary symptoms or abdominal exam red flags, and found to have microhematuria with CT scan positive for hydronephrosis and hydroureter consistent with kidney stone.

Teaching Points (Manaswini)
Approach to Sudden Onset Abdominal Pain

- Blockage:** Obstruction(Ureter, bowel, bileducts) and Perforation
- Rapid Action of a molecule:** Ingestion
- Twisting of luminal structures-** Torsion, volvulus

But important to think broad- VIPO: Vascular & Inflammation too

- Think above and below diaphragm as well -Get Beta HCG(Perimenopausal) & EKG(MI)

Spreading over space and Time: Is this pain recurrent? Identify the base rate of the disease Anatomically delineating the pain: Genito-Reno-Ureteric, retroperitoneal organs(since radiating to back)

What labs would you order ?

- Lactate levels crucial to identify if mesenteric ischemia
- Lipase for pancreatitis

What imaging would you get ?

- If we are considering a biliary pathology in an asymptomatic patient: Think of getting an USG to check the gallbladder for stones
- If Symptomatic like in this patient → consider CT to rule out alternate possibilities and delineate the CBD better

Investigation of Choice - Non contrast CT is most sensitive to pick up kidney/ureteric stones. But if they are not actively having the pain → would you be able to see the stone on the CT? → it would be seen most of the time

-Creatinine being normal here is due to the unilateral nature of the disease, and it is rarely seen that the stone obstructs the whole ureter.