08/12/21 WDx Morning Report with @CPSolvers

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CC: Abdominal pain

HPI: 78 year old woman, with PMH of end stage renal disease in peritoneal dialysis, presents with abdominal pain, fatigue and malaise. 3 weeks ago went on vacation and noticed fatigue and malaise. Pain is dull and aching. Dialysis liquid looked cloudy. Lost 5 pounds.

PMH: End stage renal disease in peritoneal dialysis. Secondary to chronic HCV infection. Transplant list. HCV w/o cirrhosis and received treatment is in viral suppression. HTN and Dyslipidemia.

Meds: Erythropoietin injections. Vitamin D. Losartan, Atorvastatin.

Fam Hx: None

Soc Hx: Born in Thailand, immigrated 20 years prior.

Health-Related Behaviors: No EtOH, tobacco or drugs.

Allergies: None

Vitals: **T**: 36.7 **HR**: 89 **BP**: 160/80 **RR**: **18** **SpO_2**: 100 **BMI**: 24
Exam:
Gen: No acute distress.
HEENT:
CV: Regular rate and rhythm.
Pulm: Clear to auscultation.
Abd: Soft, mildly tender diffusely, specially around her catheter. No erythema or drainage from the catheter. Mildly distended abdomen.
Neuro:
Extremities/Skin: Trace edema b/l.

Notable Labs & Imaging:
Hematology:
WBC: 12 (neutrophil predominance) Hgb: 10 (baseline) Plt: 332

Chemistry:
Na: 132 K: 4.1 Cl: 85 CO2: 25 BUN: 40 Cr: 7 glucose: 100
UA: SG 1.002. Colorless, no RBCs, +1 proteinuria, +1 glucosuria.
Peritoneal fluid: Cloudy, 400 WBCs (90% PMNs, 4% lymphocytes). Gram stain was negative.
Imaging:
Abd CT w/contrast: Peritoneal thickening concerning for peritoneal dialysis or superimposed peritonitis.
Started cefepime w/o improvement. Repeat peritoneal sample: 500 (80% neutrophils) AFB, fungi and bacteria cultures were sent x3 neg. A tunnel line was placed to replace the catheter as anorexia, weight loss and fatigue worsened. Universal PCR was positive for *Mycobacterium tuberculosis.*

Final Dx: TB Peritonitis in the setting of PD.

Problem Representation: 78F w/ ESRD on PD and tx HCV p/w 3 weeks of fatigue, malaise and worsening abdominal pain. Was afebrile and peritoneal fluid was cloudy, PMNs predominant and Gram stain was negative.

Teaching Points (Gabi Pucci):

- **Abdominal pain**:
  1) "can't miss" diagnosis: mesenteric ischemia (pain out of proportion to the exam), GI luminal perforation - abdominal distension (tenderness), obstruction - nausea, vomiting, absence of bowel movements;
  2) Localization: RUQ tenderness: biliary obstruction / peritoneal cavity: peritoneal dialysis puts her at increased risk of infection;
  3) Time-course of abdominal pain: acute X chronic (can't miss diagnosis are more acute). Virus and bacteria: up to 3 weeks of history. Mycobacteria, fungi can present more in a chronic time-course;
- Regarding the **PMH**: end-stage renal disease puts her at an immunodeficient state, broadening the differential for infection;
- Regarding **peritoneal dialysis**: a baseline inflammation/distention can be normal, so the challenge is to see what has changed. A peritoneal thickening can be also normal. Also, weight gain, edema, and abdominal distention can be due to ineffective dialysis;
- * If the exam is not matching the HPI: pause, consider other diagnosis - in this case think in an intrathoracic cause or skin cause, for example *
- Negative gram stain: intracellular pathogens. Repeat after 3 days. Also: malignancy, allergies.
- Enteric bacteria (secondary to perforation, for example): would be more acute AND would appear on gram stain;
- Patient getting worse with broad-spectrum ATBs: resistant / wrong pathogen (fungi?TB?) or wrong diagnosis (in this case: abscess or diverticulitis?)
- Bacterial peritonitis: >250 PMNs. Multiple negative cultures: think about a different pathogen (fungi/TB/virus)
- Peritonitis: one of the major reason to stop PD and change to HD. Pathogens: think in Staphs/Streps (outside), GI tract: G- f, for ungi: Candida.