4/11/22 Morning Report with @CPSolvers

***Case Presenter**: Madellena Conte (@MadellenaC) **Case Discussants**: Dr. Tony Breu (@tony_breu) and Dr. Eleni Pilitsi*

CC: Abdominal pain and distension

HPI: 52yoM w/ abdominal pain and distension 1 month. More severe in lower abd. Taken tylenol for last few days, minimal relief. 3-4 months ago of constipation, consistent diarrhea starting 1 month ago; watery, nonbloody, 4-5 times a day, 1 hour after eating.
ROS: Says 'his wife says my eyes have been yellow for 1 week", notes abdominal pain and 30 pound weight loss in last month. Feels fatigued. No pruritus.
FOBT was negative 3 years ago. No hx of endoscopy or colonoscopy.

PMH:
HTN
Type 2 DM
GERD

Meds:
HCTZ
Omeprazole
Statin
Gabapentin
Metformin
Novelog
Amlodipine
Levimir
Losartan

Fam Hx: Sister w/ cirrhosis
Brother w/ htn and lung ca
Mother: Type 2 dm

Soc Hx: Moved from Ecuador 30 y/o. Florist in NYC. Monogamous with wife. No recent travel, animal exposure, or sick contacts. No tobacco, EtOH or drugs.

Vitals: **T**: 37.1 **HR**: 99 **BP**: **126/66 RR**: 18 **SpO_2**: 96% on RA
Exam:
Gen: No acute distress, mildly fatigued
HEENT: Scleral icterus, EOMI
CV: Tachycardic, Regular rate/rhythm
Pulm: Inspiratory wheezes
Abd: Distension, diffusely tender mostly right lower abd, fluid wave
Neuro: A & O x3
Extremities/Skin: 2+ pulses b/l, no edema, no asterixis, Jaundice

Notable Labs & Imaging:
Hematology:
WBC: 8.9 Hgb: 10.7 HCT: 32.9 Plt: 343
Chemistry:
Na: 136 K: 3.8 Cl: 105 HCO3: 16 CO2: BUN: 26 Cr: .95 glucose: 100 Ca: 9.4 Phos: Mag:
AST:123 ALT:81 Alk-P: 658 T. Bili: 6.9 (direct: 5.9) Albumin: 3.7
PT: 16 INR: 1.35
Imaging:
CXR: Clear
Abd US: Innumerable isoechoic to hypoechoic lesions; largest 2 x 2.5 x 2 cm
Abd CT:
- Liver: Hypoechoic lesions
- GB: No thickening/fluid
- Bowel: Applecore lesion; mid-transverse colon, extension into gastrocolic ligament
- Peritoneum: Ascites w/ areas of hepatic nodularity
- Lymphadenopathy
- Impression: Large mass in transverse colon consistent with colonic adenocarcinoma w/ suspicion for hepatic mets

Hospital course: Colonoscopy w/ biopsy: Fungating mass, Adenocarcinoma w/ Neuroendocrine features
- **Sx: "Unresectable"**
- **Palliative sedation**

Problem Representation: A 52 yM w/ abdominal pain, constipation and diarrhea for 4 months and jaundice of 1 week w/o pruritus and a PMH of Type 2 DM. PE and labs notable for ascites and very high Alk-Phos.

Teaching Points (Seyma⭐):
- **Key questions:** inflammation (fever, chills, weight loss, fatigue), infection, malignancy?
- **Constipation+diarrhea** prioritizes a **luminal problem** (pancreatic insufficiency, biliary dz, usually small bowel related); if constipation followed by diarrhea: rather large-bowel problem!
- **IBD**: extraintestinal manifestations (skin, eye, joints); association of Ulcerative colitis w/ PSC (risk for Cholangiocellular-Ca)
- **Abdominal distension:** solid (organomegaly), fluid (ascites, hemoperitoneum), air (ileus)
- **Jaundice:** intrahepatic, extrahepatic (e.g. common bile duct) → acute DM+jaundice+weight loss+fatigue → **pancreatic Adeno-Ca**?, subacute inflammatory process?
- Lack of pruritus makes cholestasis less likely
- Positive Fam Hx of Cirrhosis: hereditary, e.g. hemochromatosis (HFE-mutation; 2+3 MCP),
- Ascites:
  - High SAAG (>1,1): portal HTN (most common cause is cirrhosis; non-cirrhotic (e.g. schistosomiasis, Budd-Chiari))
  - Low SAAG (<1,1): not portal HTN (inflammatory, infectious, nephrotic syndrome)
- **Clues:** Anemia (inflammatory (ACD)), Cholestatic lab pattern, normal Albumin, normal INR (rather not related to cirrhosis), very high **Alk-Phos** (infiltrative liver dz (e.g. granulomatous, hemochromatosis, mets), other sources: bone, placenta, small bowel)
- **Cirrhosis:** low BUN makes severe liver dz likely (Urea cycle: detox of ammonium by formation of urea impaired)
- **Final solution:** Primary colonic lesion (constipation+diarrhea; applecore lesion), Alk-P>600 suggests infiltrative process (metastases)