4/20/20 Morning Report with @CPSolvers

Case Presenter: *Fernand Bteich (@fernandbteich)* ***Case Discussants:*** *Zoya Qureshy (@zoyaqureshy) and Max Kelsten (@MaxKelsten)*

CC: Lower extremity edema

HPI: 60 F presents to ED with 2 weeks edema
- Symmetric bilateral lower extremity edema
- Progressive over 2 weeks
- Difficulty with "deep breath", no chest pain, orthopnea
- Similar episode in 2017 treated with lasix

PMH:
HTN
GERD

Meds:
Losartan
Metoprolol
Omeprazole
Miralax?
ASA

Fam Hx:
HTN
Diabetes

Soc Hx:
Current smoker
Alcohol use (stopped 3 months ago, previously 6 beers/day)
No drugs

Vitals: T: 98.1, HR:77, BP: 120/60, RR: 20, SpO_2: 99% RA
Exam:
Gen: well appearing, no acute distress
HEENT: unremarkable, **non-icteric sclera**
CV: systolic ejection murmur at RUSB (transient), hepatojugular reflux
Pulm: scattered wheezing
Abd: +BS, mildly distended, dull to percussion, +fluid wave, no organomegaly or masses, no caput or hernia
Neuro: wnl
Extremities/Skin: bilateral 2+ pitting edema to knees

Notable Labs & Imaging:
CBC: WBC 7.7 (normal diff), Hgb 11.7 (MCV 99.1), Plt 159
CMP: Na 129, K 4.3, Cl 103, CO2 17, BUN 29, Cr 1.4, gluc 74, Ca 8.5, Mg 1.7, Phos 3.3, ALP 170, ALT 189, AST 274, T prot 8.4, Alb 1.8, T bili 1.3. BNP 109
Lipase wnl, HBV neg, HCV neg. A1AT nl. Ceruloplasmin Nl., AMA: Nl
INR 1.6
UA: normal. Urine protein to creatinine ratio: normal
SPEP: polyclonal gammopathy
Imaging:
CXR: borderline cardiomegaly, chronic interstitial changes, no pleural effusion
CT a/p: moderate ascites, nodular liver
Ascitic fluid: 591 WBC (3% Neutrophils, 32% lymphs), 1,000 RBC, alb 0.6 (SAAG: 1.2), protein 2.0
Liver U/S: Dysmorphic liver. No portal or Hep. Vein Thromb. TTE: Unremarkable
IgG 4,500. ANA 1:1280, ASMA: Positive
Liver Bx: Lymphoplasmacytic infiltrate c/w AIH

Problem Representation:
60yo F with HTN and prior heavy alcohol use presenting with 2 weeks of progressive bilateral lower extremity edema, found to have hepatojugular reflux, fluid wave with elevated liver chemistry tests, protein gap and kidney injury, found to have elevated IgG, ANA and ASMA , as well as a liver Bx c/w autoimmune hepatitis.

Teaching Points (Moses):
Edema "big 3": heart liver, kidney. Physical exam can help: *jaundice, JVD, periorbital edema*
Edema above knee, rarely venostasis
Asymmetric bilateral LE edema: L often > R given vascular anatomy
EtOH/Edema overlap: liver pathology & cardiomyopathy
Systolic murmur: AS, HCM, VSD. Maneuvers can help, Valsalva ↓ venous return, louder murmur in HCM
Non-cirrhosis mediated portal HTN: think pre-hepatic (exp: portal vein thrombosis), intrahepatic (infiltrative, EtOH hepatitis etc.) and post-hepatic (exp: CHF)
Hidden clue for congestive hepatopathy: indirect Bili elevation. Total protein > 2.5 g/dL also suggestive
Albumin <2 should prompt search for answer beyond acute illness: kidney wasting, synthetic dysfunction etc.
Protein gap: search for immunoglobulins - monoclonal vs. polyclonal (exp. HIV, HCV, Sjogren, IgG4-RD, Castleman)
Common causes of cirrhosis: NASH, EtOH-related
Autoimmune hepatitis: AZA can be used, and is steroid-sparing.