11/20/20 Morning Report with @CPSolvers

***Case Presenter**: Ann Marie Kumfer (@AnnKumfer) **Case Discussants**: Rabih Geha (@RabihMGeha) and Reza Manesh (@DxRxEdu)*

CC: Worsening anemia

HPI: 22 F from outpatient to ED due to worsening anemia. 3 months, she was dx with alcoholic hepatitis in a nearby hospital. She had Hep C viral load <300. Seen by outside hepatologist and following.

3 months prior, drinks vodka many times a week due to personal losses. Daily nose bleeds, no hematoquezia, no melena. No period in 3 months. 2 falls last week ago and in last 3 weeks (Hit shoulder).

Not as sharp as normal. Mild diffuse abdominal pain, intermittent fevers up to 103. No rashes, no joint pain, no myalgia, no SOB. Greater than 32 and started prednisolone 24.

Her basal Hb is around 10, a month prior it was rechecked 7.1 and prior to admission 5. She had not ECD.

PMH:
Prior IV drug user (no past 2 years)
Alcohol and IDA

Meds:
Lasix, spironolactone, thiamine, low dose loratadine

Fam Hx: Non contributory

Health-Related Behaviors:
Intermittently alcohol use:2 beers about 4-5 times a month.
Alcohol last week.
2-5 packs of cigarette.
No sex activity since dx.

Vitals: **T**: 37.2 **HR**:90-108 **BP**: 96/49 **RR**:18-20 **SpO**:96%
Exam:
Gen:not in acute stress
HEENT: Pupils dilated RLA, ictericus. Nose with bilateral dry blood, no blood in back of throat
CV: Tachycardic rest normal **Pulm**: Normal
Abd: No distended, diffuse tenderness to palpation, stretch marks, No hematoma, some bruising no rashes
Neuro: No asterixis, normal finger nose, no diadochokinesis.

Notable Labs & Imaging:
Hematology: WBC:4.5 (lymphopenia) Hgb: 5.5 → 4.6 MCV: 130 Plt: 93

Chemistry:Na: 134 K: 3.3 CO2: 27 BUN: 5 Cr: 0.7 glucose: 40 Anion gap:10 AST: 138 ALT: 36 Alk-P: 113 T. Bili: 12.2 Direct: 6 Albumin: 2.6 INR: 2.46 APT: 3.9 Fibrinogen: 169

Dx Paracentesis: 850 WBC 20% lymphocytes, 8 RBC, high SAAG greater than 1.1, Specific gravity. 1.01 Bilirubin 10, 7 squamous cell. LDH: 883, Haptoglobin: < 30
B12: 878

Peripheral smear: RBC clumping, no schistocytosis

Imaging:
EKG: Borderline sinus tachycardia
CT: No signs of active bleeding, splenomegaly, portal hypertension
Positive RF, cryoglobulins positive for Mix type 2 cryoglobulinemia. Positive for RBC: Hb went up 3 points

DX: AHA secondary to cryoglobulinemia from Hepatitis C

Problem Representation: 22 F with worsening anemia (HB: 5.2) with a story og chronic hepatitis C infection and nose bleeds
DX: AHA secondary to cryoglobulinemia from Hepatitis C

Teaching Points (Rafael):

- **APPROACHING WORSENING ANEMIA + DAILY NOSEBLEED + FATIGUE + INTERMITTENT FEVER**
  - Wide range of possible of diagnosis - go after the truth: which signals do we follow? What is signal? What is noise?
  - Probably a diffuse problem with a variety of implications
  - Nutritional cause, hemolysis due to infection/alcohol use, inflammatory syndrome
- **ANEMIA**
  - Is it acute? Chronic? Helpful to check the prior lab exams, particularly the Hb level.
  - Is the patient tachycardic? What are the virals? What is the reticulocyte count?
  - Few causes that lead to acute anemia: acute bleeding (endogenous problem like coagulation disorders or thrombocytopenia? trauma?), hemolysis (increased indirect bb), acute bone marrow disease like leukemia
    - **-IDA:** Common in premenopausal female.
    - **-NUTRITIONAL DEFICIENCIES:** B12, B9 deficiencies
- **ALCOHOL ABUSE USE:** Affect PLT + coagulation with AST >ALT, non megaloblastic anemia
- **ECCHYMOSES ON THE ABDOMEN:** Remember to think about bleeding into retroperitoneum - cirrhosis? Ectopic varices? Arterial bleeding due to alcohol abuse leading splenic/mesenteric aneurysm, HCC
- **BLOOD SMEAR:** important to check for the cause of the hemolysis - schistocytes (MAHA?)? Spherocytes?
- **LIVER DISEASE AND HEMOLYSIS**: share common lab values like increased LDH, hyperbilirubinemia. . Sometimes, hemolysis can "hide" inside of the liver disease. .