5/13/20 Morning Report with @CPSolvers

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***Case Discussants**: Noah Rosenberg (noahrosenberg1) & Jacqueline Birnbaum (@JFBirnbaum)*

CC: 47F presenting to ER with chest pain & SOB

HPI:

- 3 days CP + SOB, given nitro w/ mild relief
- "Flu" for past 2 weeks. **Fever 102.7F**, with daily fevers for last 4 days.
- With worsening **chills, drenching night sweats**
- Routine lab work 1 mo ago "normal"
- ROS: no weight loss/gain/abd pain, rash. **+ dark urine, + urinary frequency, + bilateral hand tingling**, and need to **burp**
- **CP** intermittent, non-radiating pressure which is progressive. Random, when walking.
- **SOB:** constant during episode. No relieving/exacerbating factors. No cough, orthopnea.

PMH:
Chronic migraines
T2DM, HTN, HLD
DVT (not on anticoag)
Morbid obesity

Left ACL surgery

Meds:
Atorvastatin
Metformin
Losartan
Ibuprofen

Fam Hx: non-contributory

Soc Hx:
Travel: Orlando

Health-Related Behaviors:
No smoking, EtOH, or IVDU

In a monogamous relationship

Got flu shot

Allergies: None

Vitals: **T**: 37C **HR**: 70 **BP**: 145/68 **RR**: 18 **SpO_2**: 100
Exam:
Gen: anxious, agitated, shivering
HEENT: trachea midline
CV: RRR, no m/r/g
Pulm: mild tachypnea, labored breathing, CTAB
Abd: NTND
Neuro: AAOx3, normal strength/sensation
Extremities/Skin: no rash, stasis dermatitis bilaterally, hair loss below knees. Left calf tenderness, no pitting edema

Notable Labs & Imaging:
Hematology:
WBC: 1.8 (ANC 690, 48% lym, 33% PMN, 9% mono, 3% eos) Hgb: 13.9
Plt: 209, Troponin neg, D-dimer: 1.36

Chemistry:
Na: 136 K: 3.9 Cl: 105 CO2: BUN: 12 Cr: 1.2 (no bl) glucose: 116
AST: 2160 ALT: 1715 Alk-P: 240 T. Bili: 3.4, Dbili: 2.4 Albumin: 2.3 INR 1.2, ESR 40, CRP 36, Procal 0.55. Rapid flu: neg, COVID neg
UA: no RBC/WBC, small bili, neg protein, ketones, nitrite. Sp Gravity: 1.021

Imaging:
EKG: NSR, no ST changes
CXR: left basilar opacity, no pleural effusion, PTX
CT-chest: no PE/dissection/LAD/infiltrates/masses. +Hepatomegaly, 3 cm liver lesion
TTE: normal EF, no valvular lesions, mild MR
LE U/S: non-occlusive LE thrombus.
Liver U/S - gallbladder wall thickening. Severe splenomegaly. Fatty liver, no ductal dilatation. **HIDA:** hepatocellular disease. Prompt homogeneous hepatic tracer uptake
Neg: acetaminophen, HIV

Diagnostic test: HBV sAg negative, HCV PCR negative, Hep A IgM positive

Problem Representation: Middle age woman with metabolic risk factors and Hx of DVT p/w acute chest pain, SOB, inflammatory state found to have neutropenia, severe liver injury and hepatomegaly diagnosed with acute HAV hepatitis

Teaching Points (Jack):
General approach to life threatening causes of chest pain:
4 cardiac (ACS, Aortic Dissection, Tamponade, Takotsubo)
2 pulmonary (Pulmonary embolism, Pneumothorax)
2 esophageal (esophageal rupture, impaction)

Clinical Reasoning Pearl: Sometimes, a single schema can't capture the complexity of a patient and we need to start to use separate and overlapping Venn diagrams.

Dark urine: Simple approach includes hypovolemia, hematuria, and medication effect. A deeper dive includes endogenous pigments (heme, bilirubin, a high specific gravity) or exogenous pigments (e.g., food dyes or medications, like nitrofurantoin)

Isolated leukopenia is similar to isolated leukocytosis: Any acute inflammatory process can cause isolated leukocyte depression.

Acute Severe Liver Injury (AST/ALT > 1,000): Parenchymal injury (viruses [hepatitis and non-hepatitis viruses], toxins, autoimmune disease, malignant infiltration), vascular causes (e.g., shock liver, cardiomyopathy or hepatic vein thrombus), biliary causes (e.g., acute biliary obstruction)

Approach to liver lesion: Abscess (pyogenic or granulomatous infection), malignant mass (primary hepatic or metastatic disease), or benign cyst.