10/13/21 Morning Report with @CPSolvers

***Case Presenter**: Travis Smith (@RosenelliEM) **Case Discussants**: Sharada narayan and Abdulaziz Hasan*

CC: 50 Y female w fatigue- 2 weeks

HPI: Presented to the ER w 2 weeks hx of worsening fatigue and malaise and epigastric pain. ROS: Denies nausea, vomiting, fever, chest pain, dyspnea, night sweats, or fever. Denies recent travel.

Recently hospitalised for TTP for which she Received Plex and Rituximab. Also had UTI for which received nitrofurantoin.
At her most recent follow-up, there were no signs of continued hemolysis, and her steroids were weaned. She has been on Atovaquone for PCP

PMH:
-TTP Rx w Plex, Steroids, Rituximab
-Hypercholesterolemia
-Graves s/p thyroidectomy
-Paroxysmal Afib
-UTI Rx w Nitrofurantoin

Meds:
-Atovaquone
-Prednisone 20mg then tapered
-Atorvastatin
-Cetirizine
-Apixaban
-Cholecalciferol 2000IU

Fam Hx:

Soc Hx:
Drinks Occasionally
Married
Health-Related Behaviors:

Allergies:

Vitals: **T**:98 Fr **HR**:80 bpm **BP**:149/89 mmHg **RR**:16/min **SpO_2**:99% on ambient air
Exam:
Gen: No acute distress, well appearing.
HEENT: Conjunctival icterus
CV: RRR, no murmurs or gallops, no edema
Pulm: Clear, no wheezes
Abd: Tenderness in epigastrium, no visceromegaly
Neuro: Alert and oriented, no asterixis or signs of encephalopathy
Extremities/Skin: dry, no rashes

Notable Labs & Imaging:
Hematology:
WBC: 12.2 Hgb:14.1 Plt: 114K
Chemistry:
Na: 138 K:3.6 Cl:106 Bicarb: 21 BUN:13 Cr: 0.9 Glucose:94 AST:2460 U/L ALT:4055 U/L Alk-P:379 U/L T. Bili:12.3 mg/dl Direct Bilirubin: 10 mg/dl.
Total Protein: 5.1 g/dL, Albumin: 2.8 g/dL
INR: 1.4 PTT: 32 s APAP: Not detectable: Urine drug screen: Neg
HBSAg: Neg HBSAb: Reactive HIV: Neg
Anti-Smooth Muscle Ab: Neg HBcAb: Neg
HAV Igm: Neg HCV Ab: Neg
Imaging:
US Abd: Gallbladder Nml, liver normal, no hepatic masses or cirrhosis, no clots. Patent Portal vein, normal caliber.
CT abd: No gallbladder pathology, no masses. No biliary ductal dilation or pathology
MRCP: no biliary ductal dilation or defects, no cholelithiasis.

Liver Bx: Diffuse hepatocellular damage, lymphohistiocytic infiltrates extending to portal vein.
Final Dx: Drug Induced Liver Injury secondary to Atovaquone
Outcome: Patient's condition improved after cessation of drug

Problem Representation: 50 y F with history Paroxysmal Afib and recently treated TTP presents with fatigue, malaise, epigastric pain and deranged liver chemistry.

Teaching Points (Franco):
- **Fatigue vs shortness of breath**: always wants to rest vs less exertional capacity.
- **Assess the grade of weakness**: severity can point to some dx
- Absence of fever ***does not*** rule out infection especially when the pt uses immunosuppressants.
- **Conjunctival icterus:** it is conjunctiva that accumulates bilirubin, not the sclera.
- If LDH is ***high*** and ret count is ***high***, there is in fact hemolysis but the bone marrow is responding well (Probably still good reserve of iron, folate, B12).
- **Really high AST and ALT**: autoimmune hepatitis, viral hepatitis, toxins, ischemic (shock liver) , acute biliary obstruction (more painful).
- Always look for hepatic function tests and **trend** them.
- **Disproportional elevation** of AST ALT in comparison with ALK: can point out to DILI