



06/05/24 Morning Report with @CPSolvers

"One life, so many dreams" Case Presenter: Brett (@BrettMontelara) Case Discussants: Steph (@StephVSherman) and Zevan (@sargsyanz)



CC: 58 YO M p/w 6-weeks decline in exercise tolerance.
HPI: AP-predominant new-onset transaminitis noted by PCP 1 month ago. Very active prev. Last 6 weeks, dyspneic w/ exertion. He used to run 5 miles per day. Now can run only ~100 yds. 2 years ago, 1 episode of post-exercise syncope. Currently, lightheaded with dyspnea and intermittent dry cough. No other symptoms.
EKG: HR 40s with high-grade AV block
ROS: Denies chest pain. Cramping in knees, legs. No LE edema. No recent sick contacts. No rash
 No prior hx hepatitis, no medications or supplements.
 No abdominal pain, No alcohol use

PMH:
 b/I cataracts
 HLD, rash on legs
Meds:
 None

Fam Hx: None
Soc Hx:
 No tobacco no drug no alcohol
Health-Related Behaviors:
 Lives in Atlanta. Travels to RI
Allergies: unknown skin rash improved with topical steroids

Vitals: T: 98 HR: 45 BP: 98/51 RR: 18 SPO2 97% RA
Exam:
Gen: well appearing
HEENT: no icterus
CV: bradycardic
MSK: pain with passive ROM of knee
Neuro: No focal deficits
Extremities/skin: No peripheral edema

Notable Labs & Imaging:

Hematology:
 WBC: 7.8 (normal diff) Hgb: 11.1 Plt: 222

Chemistry:
 Normal BMP AST: 58 ALT: 84 Alk-P: 240 T bili: normal
 Troponin: normal TSH: normal
ESR: 42 CRP: mildly elevated
 Hepatitis: negative ANA, anti-smooth and anti-mitochondrial antibodies: negative
Imaging:
EKG: second degree AV block → complete heart block
 Echocardiogram: nothing remarkable
 MRI liver: nonspecific liver enhancement
 Cardiac MRI: no infiltrative disease
 Continued to be symptomatic with myalgias and arthralgias. Permanent pacemaker placed. As was being ready for discharged, +borrelia burgdorferi serologies. ID recs: 14-day ceftriaxone + 14-day doxy. EP outpatient clinic: pacemaker successfully removed. LFTs abnormalities resolved.

Dx: Lyme disease

Problem Representation: 58 M with intermittent travel to RI p/w subacute progressive exertional dyspnea, dry cough, and joint pain, found to have mild transaminitis and advanced heart block

Teaching Points (@maryanamribeiro):

- Better characterize the exercise intolerance - dyspnea on exertion, **exertional fatigue** -> cardiopulmonary symptoms vs anemia
 - Liver abnormalities: four patterns, **hepatocellular** (AST/ALT), **cholestatic** (bilirubin), **mixed** (AST/ALT + bili), **infiltrative** pattern (Alk-phos very elevated)
 - **Ddx:** Meds, toxins, anything new started, family history, fatty liver disease, celiac disease.
 - Exertional syncope: **red flag** - cardiac problem (structural/ rhythm)
 - USG: abdominal **LAD** + LFTs abnormality - malignancy vs infiltrative disease (sarcoidosis, amyloidosis, infection)
 - **Problem list:** Bradycardia + exertional syncope + LFTs abnormalities + abdominal lymphadenopathy
 - Heart block: **intracardiac** (hemochromatosis, amiloidosis prior scar, general fibrosis over time, conduction system disease, ischemic heart dz) vs something **external** to the heart (infection - lyme - viral myocarditis, severe electrolytes, profound hyperkalemia, any meds/toxins, procedures).
 - **Cardiac manifestations of Lyme disease:** outside (pericarditis - can extend to myocarditis), conduction system (complete heart block), if whole muscle - cardiomyopathy.
 - Knee pain (retrospective): it is so common in real life that sometimes we consider that as a noise, when we should be considering as a signal.
 - Localized lymphadenopathy may be associated with the whole picture of Lyme disease.
- Importance of the big picture: travel history, rash, AV block, polyarticular joint pain**