



# 12/2/20 Morning Report with @CPSolvers



Case Presenter: Boris Jegorovic (@BJegorovic) Case Discussants: Priyanka Athavale (@pri\_athavale) and Joshua Morris (@JoshMedPeds)

**CC:** Fever

**HPI:** 33M w/ history of splenectomy and undefined connective tissue disease who p/w 4 days of fever (>105), chills, cough, diarrhea, dizziness and nausea. 4th day of illness-- Levofloxacin sent home -- next day Sx resolved -- day after Sx returned and referred to higher institution. **Labs showed:**  
 WBC: 15.4 (89% N) Plt: 127 CRP 104 Fb 4.1 Glucose 6.3 (120)mmol/L Urea:9.8 Cr: 133 micromoles/ L AST 40 ALT 89 ALP 161 GGT 215 LDH 290 K 3.4  
 U/A- 1-20 WBCs, bacteria  
 USG: enlarged Liver (18cm), CXR normal  
**10 days later** - intermittent Sx (felt well when no fever)-- day of admission p/w confusion and agitation

**PMH:**  
 1yr ago - sepsis hospitalised-- splenectomy for sclerosing angiomatoid transformation of spleen, Dx w/ undefined CTD

**Meds:**  
 None

**Fam Hx:**  
 Nothing significant

**Soc Hx:**  
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**Health-Related Behaviors:**  
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**Allergies:**  
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**Vitals:** T: 38.3 HR: 150 BP: Exam:  
**Gen:** disoriented, confused, answered with pauses, agitated from time to time, shakes his legs while sitting  
**CV:** mild systolic murmur, tachycardic  
**Pulm:** decreased BS basal lung field (Left)  
**Abd:** Liver palpable 2 cm below R costal margin  
**Neuro:** unstable while walking tilting left and right

**Notable Labs & Imaging:**  
**Hematology:**  
 WBC: 15.4 (89% N)-- 21.3 (60.7%L) Hgb: 105 Plt: 127-- 72 CRP: 104-- 109--6.3 ESR 76 Fb 4.1-- 4.6 Glucose 120-- 8.5 Procalci 120  
**Chemistry:**  
 Na: 133 K: 3.4--N Cl: N CO2: BUN: Cr: 133-130 AST:40 --50 ALT: 89-- 93 Alk-P: 161-- 192--N GGT 215--314 LDH 290--386 CK, amylase, lipase -N T. Bili: 30.3 mmol/L (CB 14.4) Albumin:2.9 Protein 6.9  
 Coag N; D.dimer 6.--3.27 (N <0.5), Iron 7.6 Normal TIBC, Reticulocytes 2.5 % Hapta 0.08, U/A 10-20 WBC--N, Urine culture, blood culture, CSF culture N LP: 1 WBC (1N), Protein, glucose N, CRP N

**Serology**  
 HIV, HBV, HCV -ve, M. pneumoniae -ve, Trep pallidum -ve;  
 IgG +, IgM -ve EBV, parvovirus IgM -IgG +  
 Coombs Direct + (poly SP 4+, mono SP IgG 3+ C3 comp -ve, Indirect coombs weakly +) ANA 1:80, ASM 1:80 Anti-mitochondrial -ve; IgG neg (18.81) IgE 1600, IgA normal, IgM normal B2 microglobulin elevated, C3 complement 0.73, anticardiolipin ab, anti B2 IgM +  
**Liver Bx:** Portal spaced infiltrated lymphocytes, rare macrophages, rare confluent necrosis in parenchyma  
**Blood smear:** mature trophozoites of P. Vivax  
 EP: Monoclonal IgM lambda type and monoclonal IgG kappa type  
**Dx: Malaria (P. Vivax)**

**Problem Representation:** 33M no spleen, high fever, hepatic inflammation, pyuria and bacteriuria without urinary symptoms.

- Teaching Points (Kiara):**
- **Post splenectomy infections:** Encapsulated (S. pneumoniae, H. Influenzae, N.Meningitidis) and Intracellular (Listeria, Salmonella, Cryptococcus, TB)
  - Splenectomy patients commonly are given Levofloxacin: Take a pill on their way to ED if fever
  - ¼ Pneumococcal pneumonia got diarrhea
  - Bacteremia = Incidental find in the urine commonly S. Aureus (translocation from blood)
  - Relapse of symptoms after Levo: Not adequate dose, different organism, superinfection, resistance.
  - Relapsing fever: Coxiella, Malaria, Tickborne
  - S. Pneumoniae tropism for meninges
  - **Possibilities 1:**  
 Lupus like disorder- vasculitis, encephalitis-mediterranean fever, chronic infection- Brucella (granulomatous hepatitis), unrelated (viral encephalitis, past exposition)
  - **Coombs D positive:** Autoimmune hemolytic process/ sequelae from different disease.
  - Procalcitonin very high cover with antibiotics
  - **Possibilities 2:** dsDNA (SLE), UA/renal biopsy, rule out atypical infections.
  - **Malaria (See CPS illness script):** Is a transmissible disease by mosquito Anopheles and is widespread in the tropics/subtropics. The periodic fever is caused by rupture of mature schizonts. In P. Vivax schizonts matures every 48h, so the periodicity of fever is tertian "tertian malaria".