



# 07/19/21 Morning Report with @CPSolvers



**Case Presenter:** Andrea Goncalvez (@deadoida) **Case Discussants:** Mario Suito (@mariosuitofmd) and Abdulaziz Hasan.

**CC:** 21 yo M coming to the ED because of AMS.

**HPI:**  
His family reports 1 week before presentation he had 40°C fevers and dyspnea, the symptoms got worse and 3 days before, the patient noticed yellowish discoloration of his face and eyes, malaise and myalgias. 2 days before developed an aggressive behaviour and couldn't recognize the people around him. No diarrhea, no abdominal pain, nor vomiting.

**PMH:**  
None. He was a previously healthy young patient. Vaccine history no clear.

**Meds:** None

**Fam Hx:**

**Soc Hx:** Family live in the United States. They are from the Andes highlands. During their stay in Peru, they have visited places in the amazon, highlands and Lima.

**Health-Related Behaviors:**  
Sexual history couldn't be obtained.

**Allergies:** None

**Vitals:** T: 38°C HR: 96/min BP: 100/67 RR: 23 SpO<sub>2</sub>:

**Exam:**

**Gen:** Acute distress w/ conjunctival icterus

**CV:** Systolic murmur in LLEB.

**Pulm:** Diffuse b/l crackles

**Abd:** Normal

**Neuro:** Disoriented in time, place and person. GCS 13

**Extremities/Skin:** generalized jaundice

**Notable Labs & Imaging:**

**Hematology:**  
WBC: 9 (71N 19L 2M 3E) Hgb: 4 Plt: 250 000

**Chemistry:**  
Na: K: Cl: CO<sub>2</sub>: Cr: 0.8 BUN: 13 glucose: Ca: Phos: Mag: AST: 34 ALT: 201 Alk-P: 232 T. Bili: 4 Direct Bili: 0.6 Albumin: HCV, HBV non reactive.

**Imaging:**  
CXR: B/l alveolar infiltrates compatible w/ CHF or ARDS.

**Clinical evolution:** patient died despite mechanical ventilation

**Peripheral smear:** Cocci and coccobacilli within the RBCs compatible w/ B. bacilliformis

**Final diagnosis:** Bartonella bacilliformis sepsis

**Problem Representation:** 21 yoM comes to the ED presenting w/ AMS, generalized jaundice, fever and dyspnea. Lab work showed severe anemia and elevation of indirect bilirubin.

**Teaching Points (Vale):**

- **AMS:** MIST -> Metabolic, Infection, Structural, Toxins.
- **Jaundice:** Hepatobiliary system (direct) vs Hemolysis (indirect).
  - **+ Dyspnea:** Direct hyperbilirubinemia -> Ascites from acute liver injury. Indirect hyperbilirubinemia -> New onset hemolytic anemia. + AMS (Wilson's Disease)
  - **+ Fever:** Hemolytic Infections (Malaria, Dengue, Chikungunya, Leptospirosis, Yellow Fever, Bartonella); MAHA (TTP, HUS).
- **Acute Liver Failure (Infections, Autoimmune, Drugs):** Acute change in AST/ALT + AMS + Coagulopathy.
- **Peru:** Highlands -> Oroya Fever (hemolytic fever in acute phase + warts in chronic phase); Amazon -> Arbovirus (<2 wk incubation period).
- **Narrowing our Ddx:** Leptospirosis (would expect direct hyperbilirubinemia); Dengue (Complications-ex. ARDS-occur post febrile phase); MAHA (No bicytopenia); Wilson's Disease (would expect low Alk-P).
- **Pearl:** Dx for Malaria we need thick and thin smear.
- **Leptospirosis** has renal involvement -> presents with hypokalemia.
- **Oroya Fever:** Bartonella bacilliformis. Jaundice, hepatosplenomegaly, fever, anemia. 40-90% fatality. Transmitted by sandfly. Incubation period of 3-12 weeks. Neurologic symptoms suggests bad prognosis.