



11/15/21 Morning Report with @CPSolvers



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CC: fever, tiredness, malaise and pain in the knees and wrists.

HPI:
22 year-old male presents at the rural clinic after passing out at his job as a farmer in Guatemala. He is alert, oriented, has a fever of 39 degree C, and appears dehydrated. He gets better after 1L of saline hydration solution. He complains of fever for 4 days, without resolution with aspirin. He also feels tired, general malaise, pain in his knees and wrists. He also had nausea and mild abdominal pain but no diarrhea or vomits.

PMH: None	Fam Hx: None Soc Hx: lives in Guatemala, coastal area. He is a farmer that works on harvesting sugar cane Studied 3rd grade. Lives in a house made of wood and metal sheets with no floor, electricity, and water supply. They cook their food in open fire stoves and gather the water from a nearby river and rain water and store them in containers outside their home.
Meds: No medications of herbal supplements	
Allergies: none	Health-Related Behaviors: consumed alcohol on the weekend and has smoked 3-4 cigarettes per day for the past 8 years. He has had 4 sexual partners without the use of condoms.

Vitals: T: 39C HR: 94 BP: normal RR: 16 SpO₂: nl

Exam:
Gen: general malaise
HEENT: eyes seemed sunken and oral mucosa was dry, but resolved after fluids
CV, pulm and neuro: normal
Abd: nondistended, increased bowel sounds, soft with mild tenderness to deep palpation and no peritoneal signs.
Extremities/Skin: dehydrated skin in extremities with multiple papules which appeared to be pruriginous based on scratch marks and thought 2/2 mosquito bites. No jaundice. Adequate capillary refill.

Notable Labs & Imaging:
Hematology: (limited resources - rural clinic)
WBC: 6,000 normal diff Hgb: 14 Plt: 105,000 / Positive tourniquet test
Stool test positive for E. histolytica. No blood in stools. Cultures not performed. HIV negative.
He was clinically diagnosed with dengue fever, and he was instructed to return if he had complicated dengue fever signs. He was prescribed acetaminophen and oral rehydration solutions. 5 days later he returns with persistent fever and jaundice. He started having more abdominal pain and diarrhea (nonbloody). He was transferred to the hospital.
At the hospital, he had a fever of 39 degrees C, HR 70, BP 100/50, spO₂ normal. He looked septic with conjunctival and skin jaundice. No petechiae. Abdominal palpation showed liver palpable 2cm under rib cage and slightly enlarged spleen. No peritoneal signs. He was started on broad-spectrum antibiotics (vancomycin and ceftriaxone) and fluids.
Chemistry:
WBC: 3800 normal diff Hb: 14 Plt: 90,000 BMP normal AST 120 ALT 240 Total bilirubin 5.2 Direct bilirubin 4.8 ALK P 1500 HIV, Hep A, B, C, negative. Dengue IgG + and IgM -. Lepto -. Leptospirosis -. Abdominal ultrasound: splenomegaly and slight liver enlargement. No abscesses and no obstruction.
Stool and blood cultures positive for *Salmonella typhi*.
Final diagnosis: *Salmonella typhi* infection

Problem Representation: 22yoM p/w fever, tiredness, malaise, and pain in the knees and wrists. Found to have thrombocytopenia and abnormal LFTs.

Teaching Points (Rafa):

- **YOUNG MALE PATIENT W/ FEVER FOR 4 DAYS**
Important to consider the background (PMH) / occupational exposure (farming - Bartonella, Brucella, Coxiella).
- **JOINT PAIN**
Arbovirus- type infections, syphilis, virus infection / non-infection causes: crystals, hemorrhage, trauma
STIs : HIV, disseminated gonococcal infection
- **ID AND SOCIAL HX / HRB**
“ID doesn’t have many procedures”.
- **FAGET SIGN**
In the setting of fever - you expect tachycardia
If not - Faget sign - a/w intracellular organism - legionella, typhoid, dengue, yellow fever, malaria, babesiosis
Extra data point - not something crucial to the diagnosis
- **THROMBOCYTOPENIA + POSITIVE TOURNIQUET TEST**
Marker of capillary fragility - can be used as a triage tool to differentiate patients with acute gastroenteritis from those with dengue. - Arbovirus - type infection gets higher in the ddx - especially in the setting of a rash on the PE
Positive test is 10 or more petechiae per 1 square inch
Important to consider the resources available!
- **FEBRILE JAUNDICE** - look at the pattern of LFTs - hepatitis (AST/ALT) / increased direct bilirubin - leptospirosis / Malaria, yellow fever, EBV, CMV / neoplasm - Hodgkin lymphoma / inflammation (septic thrombophlebitis)
Very elevated Alk-P - hepatic infiltration / biliary tree obstruction - pyogenic liver abscess, Fasciola, Echinococcus, Salmonella