09/16/21 👑WDx Morning Report with @CPSolvers

Case Presenter: *Catalina Aron (@aron_catalina)* ***Case Discussants***: *Sukriti (@sukritibanthiya) and Priya Shenwai*

CC: Altered Mental Status

HPI: 26M previously healthy. 9 days before, started w/ fever 39C, assoc. SOB w/ moderate to medium exercise.
Yellowish discoloration of eyes and face, headache, generalized muscle pain. 3 days before admission, SOB present at rest. AMS started 2 days before admission (could not recognise his family).

PMH: -

Meds: -

Fam Hx: -

Soc Hx: -

Health-Related Behaviors: From Cajamarca (highlands of Peru), lives in Lima, but frequently goes back home. Denies travel to the jungle.

Allergies: -

Vitals: **T**: 38.5 **HR**: 98 **BP**: 100/68 **RR**: 24
Exam:
Gen: In acute distress, generalized jaundice
HEENT: Normal
CV: Normal
Pulm: Diffuse rales
Abd: Soft, non tender, no hepatomegaly no splenomegaly
Neuro: Disoriented in time and place, 14 GCS, no focal neurological signs, no meningeal signs
Extremities/Skin: Normal

Notable Labs & Imaging:
Hematology:
WBC: 9 (31% neutro, 19% lymphocytes, 2% monos, 3% eos) Hgb: 4.5 Ht: 50% Rt: 8% Plt: 250.000

Chemistry:
BUN: 44 Cr: 0.8
AST: 34 ALT: 201 Alk-P: 232 T. Bili: 4 (DB 0.7)
Imaging:
EKG:
CXR: Bilateral alveolar infiltrates → acute respiratory distress syndrome or congestive HF
Blood smear: intraerythrocytic bacilli
Final diagnosis: Oroya fever

Problem Representation: Young male patient, w/o PMH presenting with subacute fever and SOB progressing to jaundice and AMS

Teaching Points (Vale):
Altered Mental Status: MIST (Metabolic, Infectious, Structural, Toxins)
+ **Fever:** Inflammation (IMADE) + SOB -> Thorax pathology becoming systemic.
+ **Age:** Structural causes are more common in young pxs, but keep in mind drug fevers and metabolic causes.
+ **Jaundice:** Direct (liver) vs Indirect (hemolysis) -> acute liver failure -> encephalopathy.

ID Liver + Lung Venn Diagram: Echinococcus, Schistosoma, Ascaris, Fasciola, Leptospirosis.
Hemolytic Anemia: Babesia, Malaria, Bartonella. Rule out MAHAs (fever + renal failure + AMS).
B. bacilliformis or malaria? →
- Geography (jungle: malaria, andes: B. bacilliformis), more profound hemolytic anemia closer to B. bacilliformis hypothesis.
- Incubation period -> Malaria (less than a week) vs Bartonella (3 weeks).

💎When hemolysis is driving jaundice AST>ALT.
Faget Sign: Fever + relative bradycardia -> Yellow fever, typhoid fever, leptospirosis, legionella, malaria, babesia, dengue, chikungunya, RMSF.
💎What smear to choose?: Thick smear -> detect presence of parasites vs Thin smear -> identify the species of parasite.