09/3/21 Morning Report with @CPSolvers

***Case Presenter**: Kirtan Patolia (@KirtanPatolia) **Case Discussants**: Reza Manesh (@DxRxEdu) and Rabih Geha (@rabihmgeha)*

"Dangerous discoveries"

CC: Fever for one month.

HPI: 34-yo man with a history of fluctuating fever (99-102) or one month associated with night sweats. He also noticed yellowing of skin and sclera for 3 weeks. He complains of dysphagia, odynophagia, dyspnea, nausea and malaise that started 2 weeks ago.
2 weeks back: he was prescribed NSAIDs (nimesulide) for the fever. He developed a generalized maculopapular rash with got worse despite discontinuing nimesulide.
Denies weight loss, diarrhea, back pain, headache, falls, dizziness.

PMH:
HIV diagnosed 1 year ago - not on ART

Meds:
None

Fam Hx: none

Soc Hx: denies alcohol, tobacco or illicit drug use

Health-Related Behaviors: none

Allergies: none

Vitals: T: **39 C** HR:102/min BP: 118/78 RR: **22/min** SpO_2: 94% on O2
Exam:
Gen: ill appearing, uncomfortable, could barely speak
HEENT: PERRLA, presence of white plaques in the oral cavity, with dry tongue and prominently furrowed
CV: normal S1 and S2
Pulm: appears dyspneic, diffuse crackles.
Abd: NT ND, +splenomegaly
Neuro: oriented to time, person and place. No evidence of nuchal rigidity.
Extremities/Skin: generalized pitting edema in the lower extremities, which subsequently spread to arms and trunk. Maculopapular non palpable rash sparing palms, soles and face.

Notable Labs & Imaging:
Hematology:
WBC: 7k (nml diff) - lymp 2700 Hgb: 10 MCV 78 Plt: 25k
Direct Coomb + / PS- no evidence of schistocytes or malarial parasite.
Chemistry:
Na: 125 K: 4,9 CO2: BUN: 122 Cr: 3 Cholesterol 135 Triglyceride 1058
HDL and LDL normal INR 2.2 AST: 415 ALT: 224 Alk-P: 260 T. Bili: 15 D 12
Albumin: 2.4 TP: 5.4 CRP 30 Procalcitonin 1.55 apTT nl
Dengue, Chikungunya, Typhoid, Brucella, Hep A-E, Lepto, Histo, TB -> negative. HHV* and EBV not done due to resource limitations
Fibrinogen: 84 Ferritin: 14,896 IL-6: 76
Imaging:
CXR: diffuse infiltrates consistent with ARDS
USG: lymphadenopathy in blt jugular chain (17x5mm), submandibular region, blt inguinal region (18x7mm). Splenomegaly (17cm), hepatomegaly (15cm). Slight pleural and ascitic fluid.
BM biopsy: histiocytes showing HLH. In views of BM and labs - secondary HLH

Final diagnosis: HLH + HIV + probable MCD

Problem Representation: 34-yo man with a previous history of untreated HIV presents with subacute fever, jaundice, and a rash, who was found to have splenomegaly and hepatomegaly, and edema.

Teaching Points (Vale):

- **Fever:** 1st. Infections and rule out Hyperthermia, Hyperthyroidism
  + Jaundice: Indirect (hemolysis) vs Direct (hepatic)
  + Odynophagia/Dysphagia: Esophagus irritation (strictures, webs, rings, ulcers)
- **Generalized rash:**
  - **Life Threatening causes:** Meningococcemia, Rocky mountain spotted fever, toxic shock syndrome, endocarditis, necrotizing fasciitis.
  - **Red flags:** Fever, mucosal involvement, pain, medications
- **Fever + Rash:**
  - Infections: Virus (EBV/CMV/HIV), Bacteria (Syphilis, Mycobacteria), Fungi (Cocci, Histoplasmosis)
  - Drugs, Malignancy, Autoimmune.
  - Immunocompromised patient: Think Hickam's Dictum. **Vulnerable to Candida and Mycobacteria independently of CD4 count. The most common complications of HIV w/normal CD4 count are malignant.**
- **Hemophagocytic Lymphohistiocytosis (HLH):** Heme malignancy until proven otherwise. Fever, splenomegaly, hypertriglyceridemia/hypofibrinogenemia, hyperferritinemia, cytopenias. Supportive criteria: Conjugated hyperbilirubinemia, hyponatremia, transaminasemia.
- **TAFRO Syndrome-Castleman's Disease:** Lymphadenopathy, anasarca, fever, thrombocytopenia, organomegaly, reticulin fibrosis, renal impairment.