



8/8/23 Morning Report with @CPSolvers



"One life, so many dreams" Case Presenter: Ximena (@Ximechm16) Case Discussants: Austin (@RezidentMD) and Youssef (@SaklawiMD)

CC: 45 year old male that comes to the ED for 1 day of epistaxis.

HPI: A 45 year old male was brought to the ED by his wife. About one week ago, he developed malaise, fever headache. Three days before his visit, he reported 3 episodes of diarrhea and abdominal pain. On his three hour road to the hospital, he became somnolent.

He had a cold 2 weeks ago.

He has had epistaxis before.

PMH:
Ex lap 20 years ago for gunshot wound

Meds: none

Fam Hx: none

Soc Hx: Lives in Guatemala, far away from hospital, in a coastal region close to the Pacific Ocean.

He is a firefighter.

Health-Related Behaviors:
No smoking, no alcohol

Allergies: nl

Vitals: T: 39 (102) HR: 112 BP: 70/40 RR: 26 SpO2 91% on room air

Exam:

Gen: Pale and diaphoretic, dry oral mucosa

HEENT: Conjunctival hemorrhage on sclera.

CV: Tachycardia

Pulm: Bilateral crackles and rales

Abd: Tenderness on RUQ, hepatomegaly

Neuro: Responsive to only painful stimuli.

Extremities/skin: ecchymoses on the IV sites

Notable Labs & Imaging:

Hematology:

WBC: 23.5, 92% neutrophils Hgb:12.1 Hct: 34.6 Plt: 36,000

Chemistry:

BUN: 198 Cr: 6.6 glucose: 130

AST: 89 ALT: 91 Alk-P: T. Bili: 12.7 direct bili: 7 indirect: 5.7

CPK: 850

Imaging:

CXR: Bilateral diffuse alveolar opacities

UA: 10-12 RBCs, 2-3 leukocytes, nitrates negative

Abdominal ultrasound: Portal vein hyperrefrigence.

IgM and PCR for leptospirosis came back positive
Final dx: Leptospirosis!

Problem Representation: A 45 year old male from Guatemala comes to the ED with epistaxis, malaise, fever, headache, abdominal pain and somnolence. On physical examination he was septic. Labs were remarkable for AKI, hyperbilirubinemia, thrombocytopenia and neutrophilic leukocytosis.

Teaching Points (Ibrahim):

- **Epistaxis:** urgent/emergent (posterior) vs non-urgent, structural vs. systemic bleed, make sure to localize bleeding

- **Abdominal pain + inflammation:** infection (epi. hx), malignancy, autoimmune, drugs, endocrinopathies

- **Somnolence in young and healthy:** profound inflammation vs CNS, **diarrhea:** may localize to GI but often non-specific (30% in pneumonia)

- Approach w/ **ABCDE** + vascular access

- **Emergent w/ constitutional symptoms:** viral (hemorrhagic) vs leptospirosis (pul involvement) vs. CNS (meningococemia)

- **Workup and approach:** imaging (abdomen, brain), vancomycin/pip-tazo + doxy/azithro, cover dose for enceph. Bc of rapid progression, leptospirosis antigen, cultures

- **Neutrophilic leukocytosis + thrombocytopenia** → MRSA, tick-borne infections, hantavirus

- **LOW platelets** → viral and tick-borne; however, don't rule out bacterial and get cultures

- **Multi-system organ involvement:** pul/renal syndrome → sepsis, vasculitis, no proteins → r/o glomerular involvement on UA