07/16/26 Morning Report with @CPSolvers

"One life, so many dreams" **Case Presenter**: Lourenço Garcia (@) **Case Discussants**: Rabih Geha (@rabihmgeha) & Alec Rezigh (@)

https://clinicalproblemsolving.com/present-a-case/

Scribing (Bayan)

CC: 76M p/w 2 day hx of productive cough and lethargy
HPI: 2 days of dyspnea, productive cough, pallor and lethargy
Sweating, Feverish, cough, lethargy
B/L LL edema

ROS: No chest or abd pain, no nausea, vomiting, diarrhea, weight loss, arthralgias, myalgias or urinary symptoms
No recent abx and hospitalisation

PMH: alzheimer, epilepsy, T2DM, colon polyps 10 years ago

Meds: rivastigmine, metformin, vortioxetine, VPA

Fam Hx: irrelevant

Social Hx: Lives in Lisbon with wife & son
Requires assistance with ADLs
No pets,
No recent travel

Health-Related Behaviors:
Allergies: none

Vitals: T: 37.8C **HR**: 95 **BP**: 120/70 **RR**: 21 **Sat**: 89% on RA, 97% on 4L NC **BMI**:
Exam: Gen: sweating, pale
CV: RRR, Dubious JVP; **Abd**: wnl
Pulm: tachypneic, diminished breath sounds, crackles over lower lungs
Neuro: GCS 10/15, pupils ERBL, not following commands
Extremities/skin: warm, capillary refill >2s, b/l ll edema to knees

Notable Labs & Imaging:
Hematology: WBC: 17 Hgb: 5.2 (baseline 14.6) Plt: 204 MCV: 123
Chemistry: **ABG** pH 7.36 PCO2 48 HCO3 21
Na: 141 K: 4.7 Cr: 0.78 BUN: 76 Ca: 8 INR 1.1
AST: 71 ALT: 40 GGT 230 Alk-P: 222 Bili: 1.3 Albumin: 2.8 Total Protein: 4.4
ESR: 25 CRP: 57.3 LDH: 717 HBA1C 6.1
Haptoglobin < 0.10, elevated RPI ~6. Reflex **coombs** test was **negative**.
TSH 2.5, fT4 0.6 (low). Ferritin 700, folic acid > 20, VitB12 1200.
-ve ANA, anti-dsDNA, APL, COVID rapid Ag, HIV, Hep B, Hep C serology, blood cultures x2 & PCR Mycoplasma.
Normal complement, homocysteine, MMA levels

Imaging: CXR: nl. Head CT no acute changes. Chronic microvascular changes.
EKG: HR 128, sinus rhythm, poor R wave progression in the precordial leads, mild ST depression in V1-V3, no ST elevation or STEMI equivalents.
Echo LVEF 30-35%
Abdominal US: heterogenous, possibly nodular liver with ascites, b/l pleural effusion.

Clinical course: pt completed 7d course on Augmentin + Azithromycin for a respiratory infection, most likely acute bacterial bronchitis / bacterial pneumonia w/ improvement of fever + near normalization of CRP (~20).
Also transfused 3 units of RBCs, with post-transfusion Hb of ~8.
Total Bili rose to 2.4 Direct Bili 0.5. HB trended down to 5, more transfusion done. Plt trending down, nadir 60
PLASMIC score 4, ADAMTS13 activity 33%

CTAP: multiple hypodense hepatic with some parietal enhancement, abscesses vs metastasis?
Colonoscopy tubular adenoma with focal high grade dysplasia
CT guided liver biopsy: adenocarcinoma with CK7-, CK20-, TTF1-, and CDX2-cells. IHC profile not favor pulmonary or colorectal origin, suggested a possible origin in the upper GI, most likely the stomach.
Bone marrow biopsy: adenocarcinoma infiltration, same type as liver

Dx: TMA secondary to upper GI malignancy and metastasis

Problem Representation: 76 year old male p/w acute respiratory infection responding to Abx and found to have evidence of deep hemolytic anemia.

Teaching Points (Anmolpreet)

Possible: ***"Acute" inflammatory syndrome centered around the lung***.

I. Multiple symptoms: Which is the one that bothers you the most? It is important to differentiate what is signal vs noise? What problem should you consider primary and others as associated symptoms?

II. Cardiovascular vs Respiratory (i/v/o PMH): LLE made us think about CVS; But when we consider respiratory syndrome, with that PMH of neurologic vulnerability including advanced dementia with epilepsy, there is a possibility of aspiration pneumonitis. With that history of T2DM, it is important to understand how the glycemic control, because poorly controlled diabetes predisposes the patients to infections.

III. High BUN:Creat ratio: massive intravascular volume depletion, GI bleed, muscle loss (elderly patient)

IV. Heart failure + anemia: possibly anemia could be a primary driver leading to ADHF. *"Solve anemia - hemolytic? morphology?"*

V. Macrocytic anemia: 3 possible localisations: 1. **GI lumen** - malnutrition-malabsorption, ingestion of alcohol, etc.; 2. **Liver**,
3. **Bone Marrow** - can represent healthy reticulocytosis too in addition to pathological causes.

VI. High LDH and low haptoglobin: hemolytic anemia takes centerstage- makes us think of immune-mediated hemolysis (in which Coomb's may not be helpful); PBF may show *spherocytes.* Med history - to rule out any trigger for ?G6PD. ***"Coombs -ve hemolysis";*** Immunologic activation is a common cause of hemolytic anemia in elderly.; or a Stressor → increased ROS; where is the hemolysis happening? Absence of TCP takes us away from MAHA; localisation to marrow possible with high retics- bm pushing out retics.,

VII. Acquired hemolysis: systemic hemolysis (immune-mediated/oxidative) vs focal hemolysis(vascular-MAHA, marrow-PNH/marrow MAHA), liver)

Microangiopathic vs macroangiopathic hemolytic anemia