8/31/25 Morning Report with @CPSolvers

"One life, so many dreams" ***Case Presenter:*** *Lea (@xLea_B)* ***Case Discussants:*** *Julia (@JuliaSchlender1) and Andrew (@ASanchez_PS)*

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

Scribing (Lera)

CC: 53F with **persistent pancytopenia**

HPI: 1 y ago presented with spontaneous hematomas, SOB on exertion, was found to have **Hgb 6, plt 11K** -> required transfusions + started on prednisone 50 mg. BM Bx done -> hypocellular BM, increased erythropoiesis, no malignancy.

Now presents with fatigue and sicca Sx.

ROS: no other B Sx or signs of infection, no weight loss. Felt fine otherwise.

PMH:
Sjogren disease (for 30 years)
MALT lymphoma -> R parotidectomy

Meds: prednisone
EPO and G-CSF [once weekly]
IVIG every 4 weeks

Rituximab tried [twice], but pancytopenia worsened

Fam Hx:
brother died from Hodgkin's lymphoma

Social Hx: –

Health-Related Behaviors: –

Allergies: –

Vitals: T: afebrile **HR:** 74 **BP:** 130/80 **RR:** nl **Sat:** nl
Exam: Gen: unremarkable

Notable Labs & Imaging: EKG: nl
Hematology: WBC: 2.7 (diff nl) **Hgb:** 10.9 **Plt:** 52K **MCV:** 111
Lactate: nl Coags, TSH, Lipid panel: nl
Retics: Count: 28/million RPI: 1.1 **SPEP w/ IFE:** nl

Chemistry: unremarkable
Na: nl K: nl Cl: nl Ca: nl Mg: nl Cr: nl BUN: nl Glucose: nl
AST: nl ALT: nl Alk-P: nl Bili: nl ESR: nl CRP: nl T pr: 6.5
Hemolysis workup: LDH: nl Hapto: nl Coombs: neg
PBS: mild anisocytosis, poikilocytosis, **pseudo Pelger-Huet anomaly,** isolated segmentation anomalies, otherwise nl

US LN: normal LN appearance, spleen nl
PET-CT: unremarkable *(non specific diffuse uptake in BM)*
Folate: nl **B12:** 2 323 (very high)
Iron studies: Iron: 148 **TSAT:** 56 **Ferritin:** 503
ID workup: HIV, Parvo B19: neg

Immune: IgA, IgG nl IgM decreased. **CD19:** 0 **Anti-plt ABs** (+)
BM Bx: irregularly distributed mildly hyper / dysplastic erythropoiesis and mildly hypo / dysplastic megakaryocytopoiesis. No evidence of clonal process. Minor mutation found.

Dx: PNH (?) MDS can't be confirmed.
Labs stable on prednisone -> rituximab.

Problem Representation: A 53 y/o aSx female with Hx of Sjogren's disease presented with chronic pancytopenia poorly responsive to prednisone + rituximab. Labs notable for macrocytosis, PPHA, increased B12 level and iron overload. BM Bx unrevealing.

Teaching Points (Sawsan):

Approach to Pancytopenia:
- Infiltration vs marrow suppression vs destruction
- Associated symptoms
- Tempo (acute as in major stressors affecting the body like sepsis/toxin mediated like alcohol causing suppression or destruction in case of infections like tick borne illnesses vs chronic)
- Hemolysis lab and blood smear are helpful
- Keep in mind multifactorial causes being behind the pancytopenia

Macrocytosis+Pancytopenia :
- Erythropoiesis issue
- Nutritional studies (B12/MMA,Copper,Zinc,Folate)
- PBS features can be helpful to further know the issue we're dealing with.

~Sjogren's + B12 def, think of Pernicious anemia

~Problem we're trying to solve= a cell development issue

Causes of elevated B12:
Liver injury , AKI, myeloid cells issue/proliferation, chronic inflammation

Sjogren and pancytopenia DDX:
Medication, cytopenia (lymphopenia), chronic infections, hypersplenism, immune cytopenia, nutritional deficiency, lymphoma,MDS,aplastic anemia, HLH