6/28/23 Morning Report with @CPSolvers

***"One life, so many dreams" Case Presenter**: Austin (@RezidentMD)* ***Case Discussants**: Zaven (@sargsyanz) and Ricardo (@Ricardo38022025)*

CC: 58 year old woman that presents to the ED with dysphagia.

HPI: Presented after eating rice, felt that beans got stuck in her throat. Underwent urgent EGD that revealed food impaction with esophageal stenosis.
She had 9 months of progressive dysphagia associated with 12 pounds of weight loss and fatigue.

ROS: negative for choking, coughing, indigestion, b-sx, other abdominal sx.

PMH:
GERD
s/p prior dilations (peptic strictures)

Meds:
None

Fam Hx:
Mother with gastric cancer

Soc Hx:
Teacher, normal diet, no alcohol, tobacco and other drugs.

Allergies: NKDA

Vitals: T: nl **HR:** nl **BP:** nl **RR:** nl **SpO2:** nl
Exam:
Gen: no LAD, conjunctiva normal
HEENT: tongue smooth and shiny, without papilla
CV: RRR no murmur
Pulm: CTAB
Abd: no organomegaly

Notable Labs & Imaging:
Hematology:
WBC: 2.7 normal diff Hgb: 8.3 MCV: 117 Plt: 88 Retic: nl
Hapto: low LDH: 2600
Smear: few schistocytes, dacrocytes, smudge cells

Chemistry:
Na: nl K: nl Cl: nl CO2: nl BUN: nl Cr: nl Glu: nl T. Bili: 1
B12: undetectable
Intrinsic factor antibody: positive
Initial iron studies: normal ferritin and transferrin sat 70%

Course:
B12 supplementation, with improvement of hemolysis, thrombocytopenia and leukemia. Anemia persisted with a MCV of 85. Repeat iron studies showed ferritin of 11 and transferrin sat of 9%.

EGD: strictures and esophageal webs, with biopsies negative for malignancy.

Final diagnosis: Symptomatic B12 deficiency + IDA with Plummer-Vinson syndrome.

Problem Representation: 58 yo woman p/w chronic progressive dysphagia with glossitis on PE. Labs revealed a pseudo-thrombotic microangiopathy from B12 deficiency associated with IDA. EGD revealed esophageal strictures and webs.

Teaching Points (Promise):
-Approach to dysphagia: age, time course (acute vs chronic but keep in mind chronic processes can present acutely), solids vs liquids - if solids obstruction/anatomical and if only liquids would be more functional
-Location: oropharyngeal a/w neurologic problem (dysmotility; trouble swallowing liquids) vs esophageal (past oropharynx) food gets stuck
-chronic progressive dysphagia with systemic red flag symptoms → must r/o malignancy causes. Also impt to consider infx and immunocompromised status
-MC eso cancers: SCC (smokers, alcohol use) vs adeno (longstanding GERD and obesity)
-extrinsic compressions - any mediastinal masses (lymphoma, thyroid, thymoma, teratoma
-other ddx to consider: scleroderma, sarcoidosis, hernia, thoracic aortic aneurysms
-smooth and glossy tongue → inflammation glossitis, can be due to any B vitamin deficiencies (niacin, riboflavin, folate, b12) → need to question if there's underlying cause (pernicious anemia, malabsorptive disorder, malig)
-pancytopenia likely indicate BM prodn/infiltrative, macrocytic anemia folate/B12 def with hypersig neutrophils but can see hemolysis and pancytopenia in severe deficiency cases. Schistocytes → macro/microangiopathic hemolytic anemia but can see in severe B12 def (pseudo-thrombotic microangiopathy)
-smudge cells → friable crushed lymphocytes
-CLL typically see smudge cells with elevated wbc but most impt prognostic factor is thrombocytopenia
-persistent anemia + dysphagia despite tx can be due to plummer-vinson syndrome
-B12 and Fe def commonly occur together! **Achlorhydria decreases Fe absorption!** Worth getting iron study
-transferrin sat low in IDA. falsely elevated transferrin sat which is ratio of Fe to TIBC (transfusion, oral iron) → repeat study if lab results didn't fit picture!
-PVS: DICEd - Dysphagia, IDA, Carcinoma of eso, Esophageal webs
-1 nutrient deficiency → look for other deficiencies!