9/14/26 Mainstream Monday with @CPSolvers

"One life, so many dreams" ***Case Presenter****: Glen* ***Case Discussants****:Youssef (@saklawiMD) & AMK (@annkumfer)*

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

Scribing (Kaleem):

CC: 37 year M with **3 years** history of **recurrent transfusion dependent anemia**

HPI:

// Previously well until 3 years. Had dark urine in the morning ..didn't get medical attention ,assuming dehydration

// 2 months later had an **episode of yellowing of eyes** ,intermittent abdominal and back pain..diagnosed dyspepsia. PPIs given empirically with no improvement

// After 6 months had an episode of fatigue ,palpitations ,heachaches and dizziness …complicated by syncope ,good transfused and improved .had an ECG was normal and no further investigations.

This visit presenting with another symptoms of anemia and started on transfusion

ROS: episode of jaundice,Loss of epitete ,loss of wight ,and erectile dysfunction.

[-] for bleeding, recurrent infections,loss of sensation and muscle weakness,skin rash ,changes in stool colour and pruritus

PMH: none

Meds:
omeprazole
Aspirin
tylenol

Fam Hx: nl

Social Hx: no drug or EtOH use

Health-Related Behaviors: nl

Allergies: nl

Vitals: T: 36.8 **HR**: 116 **BP**: 103/62 **RR**: 18 **Sat**: 96%

Exam: Gen: well looking,undernourished , jaundice and pallor and NO lymphadenopathy,ecchymosis and skin rashes

HEENT: conjunctival and palmar pallor

CV: RRR, tachy, soft systolic murmur at the apex

Abd: mild diffuse tenderness

Pulm: nl **Neuro**: nl **Extremities/skin**: nl, no rashes

Notable Labs & Imaging:

Hematology: WBC: 1.85 (neut 1.1 nd lymph 0.6) Plt: 106

Hgb: 4.4 [last admission 2.2] -> 9 after transfusion MCV: 98.9 mch 30.6

RDW 27.9 MCH 30.6 MCHC 30.9 HCT 18.1 RETIC COUNT 16.13

Smear: nl appearing

Chemistry:

Na: 138 K: 4.3 BUN: 8.2 Cr: 0.6

AST: 183 ALP: 63 GGT: 13 T. protein: 7.45 Alb: 4.19

LDH: 2273

ID screening: HIV: neg **Rapid malaria test:** neg

B12: 1K**, folate:** both nl

Flow cytometry.. Neutrophils , monocytes ,red cell lack expression of GPI linked markers

96.3 % of neutrophils lack expression of FLAER, CD24,CD16.91% of monocyte lack expression of CD14 ,FLAER 21% of red cells lack expression of CD59 and CD55

Final dx: paroxysmal nocturnal haemoglobinuria

Problem Representation: A 37 year old man with 3 year history of recurrent transfusion dependent hemolytic anemia..evidence of intravascular hemolysis and no prior comorbidities ..found on flow cytometry to have paroxysmal nocturnal haemoglobinuria

Teaching Points (Manasa)

Anemia: Destruction vs production vs blood loss?
Intravascular or extravascular?
Any clues to splenomegaly in the hands, Peripheral smear, MCV.

Younger patient> Suspicious for genetic/ bone marrow aplasia/ infiltration disorders.
Urinalysis to look for Hematuria or hemoglobinuria to support indirect hyperbilirubinemia.

Intravascular causes of hemolysis> G6PD? PNH? Drug induced anemia? Infections.

Anemia Abdominal pain> From hepatosplenomegaly/ Gallstones from indirect bilirubin/ Pain from portal vein thrombosis in Budd chiari. Endemic diseases like malaria and nutritional deficiencies like B12 and folate may be excluded initially.