



10/06/23 Morning Report with @CPSolvers



"One life, so many dreams" Case Presenter: Sawсан (@sawsan_Hs) Case Discussants: Reza (@DxRxEdU) and Steph (@StephVSherman)

CC: 43 year old woman with intermittent fevers for 4 months

HPI:

May 2023: Abdominal pain for 1 month associated with fevers. Patient localized the pain in the epigastric region as a burning sensation and exacerbated after eating spicy food. Pain was associated with bloating, nausea and vomiting.

EGD: findings consistent with **Gastritis 2/2 H. pylori** - treated accordingly.

The fever started at the same time as the abdominal pain but didn't coincide. Daily fever spikes for 2-3 consecutive days and then 1 week free of fevers. Also pt endorses night sweats.

Patient has lost 14 kgs in the last 4 months. Patient refers a rash, joint pain and painless oral ulcers.

ROS: dyspnea
Colonoscopy was normal

PMH: Type 2 diabetes mellitus

Meds: metformin famotidine

Fam Hx: Crohn's disease in two siblings
FMF mother dx in adulthood

Soc Hx: No relevant history

Vitals: T: 36.3 HR: 109 BP: 138/76 RR: 20
HEENT: Conjunctival pallor
Abd: mild hepatosplenomegaly

Notable Labs & Imaging:

Hematology:

WBC: 5.6 (89% neutrophils 7.5% lymphocytes) Hgb: 7 → 10.4 Plt: 315 MCV: 71.9 MCH: 24.5. RDW: 19.6

Blood smear: **Microcytic anemia, hypersegmented neutrophils.** No Rouleaux

Chemistry:

Na: 131 K:4.23 Cl:94 BUN: Cr:**5.35** glucose: Ca: **11.5** Mag: 3.29

Alk-P: 75 Albumin: 3.22 Total protein: 5.7 uric acid 8.04

AST and ALT: nl

Urinalysis: WBC: 5-7, **Blood +2 Protein +1.** RBCs <5

LDH 149. **ESR: 100**

PT: 12.5, INR: 0.9

ANA: negative

B12: 132 - low

SPEP: increased alpha 2 and beta 2 gamma globulins

Imaging:

Echocardiogram: normal LVEF - minimal pericardial effusion

Repeat endoscopy: **severe pangastropathy and thickened gastric folds.**

PAN-CT: minimal hydronephrosis, splenomegaly, **paraortic lymphadenopathy and adrenal mass that needs further investigation.**

Renal biopsy: sclerosed glomeruli, no mesangial thickening. Luminal calcifications. Peritubular eosinophilic infiltration. IgG+ linear deposit.

Complement negative. No evidence for malignancy.

Pathology report of renal biopsy: **diabetic glomerulopathy.**

Dx: Patient is still undergoing investigation, as several tissue biopsies have not been able to reveal the diagnosis.

Problem Representation: 43 yo F with abdominal pain, intermittent fevers, serositis, weight loss, rash, joint pain and painless oral ulcers. Labs and imaging remarkable for AKI, hypercalcemia, severe pangastropathy with thickened folds and renal biopsy consistent with diabetic glomerulopathy.

Teaching Points (Mario): 1) High T as a Syndrome: Fever (hypothalamus dependent) vs Hyperthermia (H-independent) 2) Fever (Specific inflammation marker): pertinent negatives (i.e unpasteurized milk exposure) guide the initial evaluation. 3) Subacute/ chronic non localized inflammation DDx: atypical/ exogenous pathogens and walled of infections, HIV status KEY, systemic autoimmune diseases (self- antigen dependent): SLE, SpA, IBD, Behcet, autoinflammatory diseases (antigen- independent): FMF. 4) Malar rash: nasolabial fold spared from sun incidence. Oral ulcers in SLE usually painless. Acute anemia: Blood loss, hemolysis, acute underproduction (leukemias). 5) Kidney and Calcium: increased urinary Ca wasting (less 1, 25 Vit D) and Phos retention cause secondary hyperparathyroidism. 6) AKI vs CKD: hyperparathyroidism, kidney atrophy. 7) Intrarenal AKI: vascular (bland sediment), glomerular (proteinuria, acanthocytes), tubular (muddy brown casts), interstitial (pyuria, WBC casts): UA W/ MICROSCOPY IS KEY. 8) High heme, normal RBC: pigment tubulopathy: myoglobin (rhabdo), hemoglobin (intravascular hemolysis). 9) Low B12: Low ingestion, Intrinsic factor def (gastric disease: chronic gastritis, pernicious anemia), pancreatic insufficiency/ malabsorption, meds (metformin, PPI). 10) Splenomegaly: water (from Portal HTN), molecules, RBC's (chronic hemolysis) WBC's (autoimmune: SLE, Stills, Felty; infection: HIV, Mono, Granulomatous (TB, Endemic mycoses, Visceral Leish, Whipple dz) ; malignancy: lymphoma).