8/15/26 Morning Report with @CPSolvers

"One life, so many dreams" **Case Presenter**: *Jeffrey Shen* **Case Discussants**: *Jahanvi Grover*

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

Scribing (Ram):

CC: 24Y M 4 days of fever, chills, diffuse joint pain, headache, neck pain and generalized weakness

HPI: **stomach pain, nausea, fever, 1 episode of vomiting** since 4 days

1 month of generalized weakness, decreased ADL not improved with diet, supplements or workout routine

Joint pain - lower back, heels, ankles for many years prior h/o ankle trauma 6Y ago

ROS: No diarrhea, blood in stools or blood in vomit

PMH:
Lupus (rash 2Y prior)

Meds: No meds
Some supplements

Fam Hx: AS in father

Social Hx: weight lifting, personal trainer

Health-Related Behaviors: No smoking, alcohol or illicit drug use

Allergies: N/A

Vitals: T: 38.3C **HR**: 108 **BP**: 106/66 **RR**:18 **Sat**: RA
Exam: Gen: Tired, AAOx3
CV: nl **Pulm**: nl **Abd**: nl
Neuro: **Tenderness, stiffness (+) neck flexion**; no focal weakness
MSK: **Diffuse tenderness to joints**, no synovitis, no joint effusions, ROM - achy symmetrically in shoulders, ankles, lower back; no CVA tenderness;
Skin - Acne - papular - malar distribution, down to the chin and over the eyebrows; no oral ulcers, purpura or petechial lesion, no Raynaud's

Labs & Imaging:
Hematology:
WBC:14.8 Hgb: 14.8 Plt: 274
LP: normal, WBC 1, protein 30, glucose - 70, PCR (-), culture (-)
Chemistry:
Na: 137 K: 3.2 Cl: 89 **HCO3: 38 Ca: 15.2 Phos: 2.1 Mg: 1.8**
BUN:41 **Cr:2.4 (0.8)** Glu: 104 T. protein: 7.4 Alb:4.1
Ionized Ca- High; **CK - 1000**, AST - 80, ALT - 50, ALP - 74
VBG - **pH 7.52**, pCO2 resp comp.; UA - hyaline casts; otherwise nl
Hyper Ca:PTH - 5; PTHrp - undetectable, 25-OHD - 30, 1,25-OHD - 11(same on repeat); SPEP - nl
ID workup:BCx (-), HIV, STI panel, Hep panel, parvovirus, resp panel (-)
Rheum workup: ANA - 1:80, other antibodies, RA, CCP (-); C3,C4 - nl
Imaging:
EKG: Sinus tach; Renal USG - no obstruction ; CT chest - nl; CTAP - nl
Skin biopsy: necrotizing granuloma (Lupus Miliaris Disseminatus Faciei)
Treated with fluids, calcitonin; symptomatically improved
H/o consumption of CaCO3 -> increased intake in recent past
FU - arthritis attributed to lifestyle

Dx: Milk Alkali syndrome in the background of osteoarthritis with an acute presentation of food poisoning

Problem Representation: 24M with chronic polyarthralgia presenting with acute febrile illness, nausea, with exam notable for diffuse joint tenderness and a papular facial rash, found to have severe hypercalcemia, metabolic alkalosis and AKI.

Teaching Points (Gillian)

Approach acute-on-chronic presentations as "inside-out vs outside-in"
When a patient with unclear chronic symptoms try to separate background from foreground and ask:

- Inside-out: is the acute presentation an evolution or flar of person's chronic problem?
- Outside-in: Is there a new process superimposed on their background?
- Is the new process focal or diffuse? A focal infectious process is more likely to be bacterial, diffuse more likely to be viral or atypical

Metabolic abnormalities are hard to predict based on presentation, they deserve their own diagnostic attention. When one appears, pull out of the case temporarily and build a differential

Hypercalcemia: calcium comes from the bone or the gut, leaves to go onto bone or kidney

- PTH-dependent vs independent
- Hypercalcemia + AKI + alkalosis consider milk alkali syndrome
- Ask what your proposed mechanism predicts: granulomatous hypercalcemia is usually calcitriol-mediated, so a low 1,25-$(OH)_2$D should make you question whether the granuloma is actually causing the hypercalcemia.
- Association is less convincing when the predicted physiology is absent

Once you have an answer, go back to the beginning

- What remains unexplained
- Not every finding needs to be unified, you can look for a second process