10/5/20 Morning Report with @CPSolvers

Case Presenter:Gurleen Kaur (@Gurleen_Kaur96) ***Case Discussants:*** Erin Floyd (@efloyd14) and John Mullen

CC: Weakness + diarrhea

HPI: 55M without relevant PMH started 7-10d prior to presentation (after reporting being under the sun) with generalized weakness, muscle ache, vomiting, nausea, decrease appetite, fatigue and chills. Acute diarrhea 4-5 stools/day without blood or mucus.

PC normal EKG, Cr 17 → hospital. No cough, disuria, hematuria, w/good urinary output, no visual change or neuropathy.

PMH:
BP elevated
Left knee repair

Meds:
None

Fam Hx:
HTN mom
CAD father

Soc Hx:
1-2 alcohol week
No tobacco drug

Health-Related Behaviors:

Allergies: NA

Vitals: T: 37.4 **HR:** 74 **BP:** 180/88 **RR:** 20 **SpO_2:** 97% RA
Exam: **Gen:** No acute distress, alert, orientated
HEENT: Normal
CV: RR, S1 S2 no murmurs or gallops
Pulm: CTAB
Abd: Soft no tender, no hepatosplenomegaly
Neuro: 5/5 strength bilaterally, no focal deficit
Extremities/Skin: Normal

Notable Labs & Imaging:
Hematology: WBC: 9.6 Hgb: 10.9 Htc: 30.6 MCV: 86 Plt: 367
Chemistry: Na: 132 K: 5 Cl: 95 CO2: 17 BUN: 113 Cr: 17.4 glucose: 132 Ca: 8.7 Mag: 2.5 P 10. Anion Gap: 20 AST: 14 ALT: 22 Alk-P: 60 T. Bili: 0.2
Albumin: 4.1 Total Protein 7.1, CK 180 Lact .8
↓Total iron captation, % ferritin, B12 and TSH normal

UA: blood, leukocyte esterase 1+ protein 10-20 WBC FeNA10%
Urine prot 70 Na 42 Cl 31 Urea Nitrogen: 264 Cr 54 Osm 209 Albumin 10.7
Sediment: granular cast
Antiphospholipid normal, C3 C4 normal B2 microglobulin 12.1
Biopsy: Preliminary light chain deposition -> Kappa LC nephropathy + acute tubular injury + interstitial nephritis
UPEP: Paraproteins **SPEP:** Serum light chain Kappa 5981, K/L ratio: 636
Urine light K/L ratio 1496 IgG 509 IgM 951 IgA 74

Imaging:EKG: nl; USG no hydronephrosis, enlarged prostate gland
Skeletal survey: no lytic lesions
Bone marrow biopsy: 31% Lympho and 21% Plasma cells
Cytometry 16% B cells and 3% plasma cells → **Kappa restricted B cell lymphoproliferative neoplasm. MYD88 mutation Waldenstrom Macroglobulinemia**

Problem Representation: 55M w/ no PMH presents w/ acute onset of weakness and diarrhea. Exams showed interstitial nephritis and abnormal K/L ratio. Cytometry revealed Kappa B lymphoproliferative neoplasm consistent with Waldenstrom macroglobulinemia.

Teaching Points (Maria):

- **Acute diarrhea**: *Not all inflammation means infection*. Acute= "I"-infection, Sub-acute, chronic: "MADE"
- **Localization** - up to 30% of pts with CAP have GI symptoms. *Not all GI symptoms mean GI localization.*
- **Astenia "keys"**: generalized weakness + present at rest. *Not all neuro symptoms have neuro causes.*
- **Acute kidney injury**
  - Think etiology: prerenal, intrarenal, postrenal (older men - think obstructive).
  - Think timing: what's the baseline Cr of the patient?
  - "Chicken and the egg" - uremia can cause pericardial rub, uremic frost, asterixis, any nonspecific symptoms (N&V)
  - Think associated abnormalities: acute renal failure usually has electrolyte or acid-base abnormalities.
- **Urinalysis:** FeNa <1% - prerenal.
  - Proteinuria:
    - Not all protein is measured the same: dipstick, protein/creatinine, 24 hours, etc.
    - Not all proteinuria is glomerular. Think tubules too! Tubular damage can be ischemic, infectious, drug, pigment- myoglobin, obstructive-paraproteins, crystals.
    - Not all proteinuria is nephrotic syndrome. MC cause of nephrotic range proteinuria comes from DM nephropathy.
    - Not all protein is albumin; non albuminuric → paraproteins
- **Emergency Dialysis:** AEIOU: **severe** acidosis, electrolyte abnormalities, intoxication, overload of fluids, uremia.