9/2/20 Morning Report with @CPSolvers

***Case Presenter**: Husam Alzayer (@husamjz) **Case Discussants**:Kannu Bansal (@KannuBansal4) and Sakara Seng*

CC: Nausea for 6 weeks

HPI: 57 F started to have nausea for 6 weeks with inter intermittent abdominal that goes to the back and Right flank bilateral leg swelling. No other symptoms. No changes in bowel habits. No changes in urine, joint paints, skin rash or ulcers. No SOB, no chest pain

PMH: Hemochromatosis 15 y ago treated with Regular phlebotomy, Idiopathic Lumbar stenosis, Untreated arthritis, Post Cholecystectomy

Meds: Esomeprazol. Tried in BID Palindatol?

Fam Hx: Unremarkable

Soc Hx: Lives with husband. Self quarantine. Unemployed. Farm and dog

Health-Related Behaviors: No ETOH, no smoke

Allergies: None

Vitals: **T**: 36.3 **HR**: 74 **BP**: 132/85 **RR**: 16 **SpO_2**: 98 **Weight:** 74.4 kg BMI; N

Exam:
Gen: Comfortable
HEENT: Normal, no lymphadenopathies
CV: RRR no murmurs, regular pulses
Pulm: CTAB
Abd: Soft and lax. No tenderness
Neuro: Normal
Extremities/Skin: Lower edema pitting

Notable Labs & Imaging:
Hematology:
WBC: 4.7 Normal differential Hgb: 12.2 MCV:94 Plt: 229
Chemistry:
Na: 140 K: 4.8 Cl: 105 CO2: 28 BUN: 20 Cr: 0.8 (baseline) glucose: Ca: 8.45 Phos, Mag: N Cholesterol: 491 LDL: 491
ALT: 10 Alk-P: 86 GGT: 17 Albumin: 19 Ferritin: 107
Urine: 3+ blood and protein, no glucose,
Urine Protein/Creatinine: 890
Hgb: 38 ANA: neg ANCA: neg Anti PLR2q: negative
SPect: Negative
Serum kappa and lambda light chain: elevated
Free kappa: 44.5
Upep: normal
Imaging:
Renal US: normal
Kidney Biopsy: Primary Focal Segmental Glomerulosclerosis. Sclerosis 5% so it could improve. Started in furosemide and high dose prednisolone. Partial remission creatinine became normal and albumin improved

Problem Representation:
57 F presented with nausea for 6 weeks. She had lower edema pitting. Labs showed high cholesterol, normal creatinine, elevated Serum kappa and lambda light chains. Final Dx:Primary Focal Segmental Glomerulosclerosis.

Teaching Points (Priyanka):

- **Abdominal pain Anatomical approach** (radiating to R-back): liver (inflammation, congestion, infiltration), biliary (cholecystitis, colic), epigastrium (GERD, gastritis)
- **Nausea-** non-localizing Sx- medications, systemic causes (renal dysfunction, HF, adrenal insufficiency), *"what company does nausea keep?"*
- **Bilateral lower leg swelling:** generalized swelling→ cirrhosis, cardiomyopathy, nephrotic syndrome. Consider pure obstruction of lymphatics vs venous system as contributory causes
- **Hemochromatosis**: abnormal iron deposition in various organs--> cardiac (cardiomyopathy, CHF, arrhythmia) , pancreas (DM2), other endocrine organs (pituitary, adrenal insuff); liver (cirrhosis), arthralgias, renal (DI), skin (bronze diabetes)
- **Nephrotic syndrome-** damage to glomerular filtration barrier, massive proteinuria (>3.5g/ 24h). **Primary causes**: **FSGS** (most common, can be idiopathic, Cr can be nl with low degree of cortical fibrosis), MCD, membranous nephropathy, membranoproliferative glomerulonephritis (MPGN, also w/ nephritic features). Lab findings: hypoalbuminemia, hyperlipidemia, hypercoagulability, fatty casts in urine. **Secondary causes**: DM2, amyloid, lupus
- **Amyloidosis**: abnormal protein aggregation of protein in various organs, most commonly kidney **(amyloid nephropathy)**. If there is CKD, the K:L ratio can be abnormal since FLC are renally excreted
- *In renal disease, K is filtered less than L and thus a K/L ratio may be up to 2*