8/17/26 Morning Report with @CPSolvers

"One life, so many dreams" ***Case Presenter****: Magnus* ***Case Discussants****: Maddy (@MadellenaC) & David (@davserantes)*

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

Scribing (Seeme):

CC: 17 y old FM with lower extremity swelling

HPI:

Bilateral lower extremity edema for 2 weeks, periorbital swelling during the early day and then resolves

ROS: not sure about weight loss, no fever, no bowel or bladder symptoms

PMH:
Asthma
Hay fever

Meds:
-

Fam Hx:
-

Social Hx:
High school student

Health-Related Behaviors:
Occasional alcohol use, no substance use

Allergies:
NKDA

Vitals: T: afebrile **HR**: 92 **BP**: 137/86 **RR**: 18 **Sat**:98% on RA

Exam: Gen: no distress

HEENT: no JVD or LAD

CV: wnl

Pulm:wnl

Abd: wnl

Neuro: wnl

Extremities/skin: bilateral pitting edema upto the knees

Notable Labs & Imaging:

Hematology:

WBC: 5.8 **Hgb: 17.4** Plt: 256 MCV:

Chemistry:

Na: nl K:nl Cl: nl Glu: 88

AST: nl ALT: nl ALP: nl T. protein: **Alb: 1.1 (Low)**

ESR: CRP: LDH:

UA: urine Protein/Cr:7.6, marked proteinuria

HepB, hepC, HIV: neg

IgG: low, IgM: nl

Anti PLA2R: neg

Renal biopsy:

Light microscopy:nl, immunofluorescence: neg for deposition, electron microscopy: podocyte foot process effacement almost 80%-90%

Dx: Nephrotic Syndrome-minimal change disease

Problem Representation: 17 y old FM presented with bilateral lower extremity swelling for 2 weeks, UA showed marked proteinuria and albumin was found to be low. Renal biopsy showed podocyte foot process effacement.

Teaching Points (Varsha)

Lower extremity swelling → Bilateral/ unilateral; Age (understanding baseline/host/ Risk factors, PMHx)

- **B/L: systemic causes** → heart, liver, kidney, proximal venous compression
  - Heart - JVD, Pulmonary edema (congenital cardiomyopathy, low output HF)
  - Liver: BP (lower), abdominal distention, skin finding
  - Kidney - BP (high), periorbital swelling (Nephrotic/ nephritic syndrome: glomerular destruction→ protein losing → low oncotic pressure)
- **U/L: Localised cause** → DVT, Venous compression, Inflammatory conditions

Nephrotic syndrome: Hypertension, Hyperlipidemia, Low protein (Low albumin, low Ig)

- Minimal change, FSGS and membranous nephropathy
- Primary (more common) Vs secondary (20% - infections, malignancy, NSAIDs)
- Complication: clots, infections
- Very low albumin (<2.5) → increased risk for clot → DVT US, etc
- Pathology: Minimal change disease (young) → Primary/ secondary (lymphoma/ NSAIDs)
  - Primary Membranous nephropathy : Anti Phospholipase A2, Anti Thrombospondin (bypass renal biopsy)
  - Infectious cases: hepatitis, HIV, syphilis