



04/11/25 Morning Report with @CPSolvers

"One life, so many dreams" Case Presenter: Zak (@) Case Discussants: Rabih (@rabihmgeha) and Sharmin (@Sharminzi)



Scribing (Patricia)
When the pressure rises
CC: 30yrs old F with new onset of **haemoptysis**

HPI: She developed 2 episodes of coughing blood, mixed with sputum. Also have **dyspnea, over the past 2 months**, breathless even at rest
She also presented with orthopnea, **facial puffiness, weight loss, night fevers**, cough initially dry, now bloody and 2 episodes of epistaxis

ROS: no rashes, no paresthesia

PMH: none

Fam Hx: non significant

Soc Hx: no alcohol

Health-Related Behaviors: no drugs, hx 5 yrs smoking

Meds: None

Allergies: none

Vitals: T: 37.1 BP: 172/105 RR: 22 HR: 115 Sat: 99%
Exam: Gen: Facial swelling, no clubbing no lymphadenopathy
HEENT: no nasal bleed
Neck: increased JVP
CV: S1, S2 gallop, bilateral pitting edema
Pulm: mild respiratory distress, productive cough with white sputum, **bibasal crackles**
Abd: soft, non tender, no ascites
Neuro: no deficit MSK: no rashes

Notable Labs & Imaging:

Hematology:
WBC: 12 Hgb: 7.9 Plt: 154 > 300 Hct: MCV:
Glucose 130, pregnancy test negative

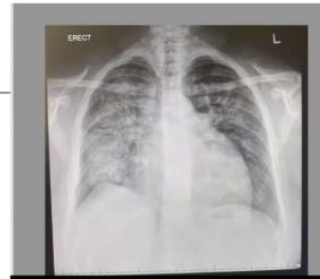
Chemistry

Na: 133 K: 3.5 Cr: 15.6 eGFR: 4 BUN: 121 Ca: 1.93 (nl) Ph: nl Mg: nl
CRP: 168 LDH: 478 AST: nl ALT: nl Alb 51 Coags nl Trop nl
UA: 3+ protein, positive blood, 0 WBCs, a lot of RBCs
RF nl, ANA and dsDNA negative, C3 and C4 nl, ANCA nl, anti-GBM negative
Hiv neg, hepB, C neg

EKG: LVH, sinus tachy
Echo: mild LVH, diastolic dysfunction (HTN heart disease)
CXR: diffuse b/l opacities (central > peripheral), c/w pulmonary edema & DAH
KUB: nl sized kidney, increased echogenicity

Renal Bx: glomerulosclerosis with tubular atrophy, no IC deposits or crescents, fibrosis with fibrinoid necrosis and occlusion of the vessels
Sputum positive for M. tuberculosis

Dx: **Severe malignant hypertensive nephropathy**



Problem Representation: Young female presents with inflammatory disease and renovascular component

Teaching Points (Julia):

Hemoptysis & Epistaxis + HF + inflammation

I) **Stable vs. unstable** (vitals are vital) -> management > diagnostics?
No miss diagnosis: AV fistula -> hemodynamic consequences
Mimickers: Epistaxis, GI bleed

II) Why? localizing sign?

- lung issue vs. systemic structural blood vessel wall issue
- Bleeding -> Anemia -> high output cardiac failure = consequence / red herring
- Endocardial (valvular) turbulent => acquired vWS = Heyde's Syndrome

Sinus tach BPs high and dias low + HF -> Chronic aortic insufficiency: high stroke volume

AKI (Facial puffiness + high Cr) PLUS HTN -> renal vascular disease/GN

Inflam. syndrome: Serositis vs. innocent bystander (heart)
complements nl: ANCA Vasculitis, anti GbM & IgA Nephritis

- ANCA sens ~ 80-85% (dep. systemic) - anti GBM ~ 95%
- Paraprotein ! - biopsy !
- Infectious -related GN is generally hypocomplementemic

RTX: Central > peripheral, no pleural effus -> **DAH** (capillary bleed; ven. HTN?) OR Pulm. edema

GN diagnosis: I) proteinuria + hematuria = necessary II) exclude mimicker: no alternative causes AKI and bleeding (RVD kidney stones, outflow flow obstruction)

Glomerular bleeding (vasculitis, anticoag nephropathy, arterials are clotted w/ pressure increased behind clots)

- Renal complement mediated TMA w/ 2nd bleeding because of capillary HTN is hard to distinguish from malignant hypertension