

# 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

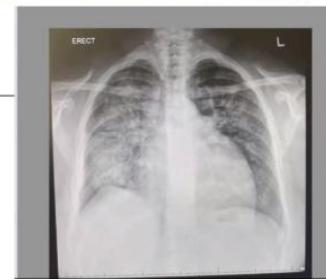
Neck: increased JVP

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 BPsys 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 (RVF 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