08/06/25 Morning Report with @CPSolvers

"One life, so many dreams" Case Presenter: Anmolpreet Kaur (@anugrewal19) Case Discussants: Dr. Rich Snyder

Scribing (Vijay/Anmol)

CC: Shortness of breath, dry cough x 7 days

HPI: A 33 year old obese female presented to the ED with the CC of shortness of breath with dry cough for 7 days. The dyspnea was worse on lying down and had been progressive for over a week; on presentation, the patient was in acute dyspnea requiring oxygen support.
Referred from a nearby hospital in view of an abnormal echocardiographic assessment. She had a recent lower-segment caesarean section delivering a late preterm baby 5 months back. Her pregnancy was complicated by high blood pressure. She reports feeling uneasy ever since, and now has these progressively worsening symptoms for 7 days.

ROS: no chest pain, presyncope, syncope, pain in the abdomen, rash.

PMH:
T2DM, HTN (since 1st pregnancy)
Surgical history:
LSCS (6 years back)
LSCS (5 months back)
Last admission: G5P1L1A3
34 wks+5 days gestation
High BP for a day (200/110→ tab labetalol 100 mg → 180/100 → 190/110 mm hg with proteinuria, managed as chronic HTN with super-imposed pre-eclampsia + FGR → LSCS
(HTN dx prior to 20 wk)

Meds:
Tab Telma-AM 70/5 mg - BD
Tab metformin 1 g - BD

Fam Hx: Nl

Social Hx:
married for 8 years → has 2 children
Non smoker, no addictions

Health-Related Behaviors: **nl**

Allergies:nl

Vitals: BP:180/100 **HR**:124/min **RR:30/min SpO2:** 89 RA **BMI:** 38(238 lbs)
Exam: Gen: distress
CV: JVP S1S2. No gallops/murmurs.
Pulm: B/L crackles
MSK: B/L LE edema

Notable Labs & Imaging:
Hematology:
WBC: 13.3(PMN predominance) Hgb: 10.1 Plt: 356 MCV:74.2
Chemistry
Na:137 K:5 Cr:0.9(Baseline 0.8) BUN:28→42 Ca:8.8 Ph:3 Mg:1.9 Glu:276 Cl:108
CRP:23.99 AST:15 ALT:15 ALP:112 Bili:0.41 Total pr:6.0 Alb:2.98 T.Chol:258
Uric acid:6.5 HIV, HepB, HepC-NR
UA: 3+, 24hr 7.6g(During 2nd pregnancy)
Current UA- 3+ protein, RBC 20-25/HPF, UPCR 5.3, 24hr protein 7.4g
TFT: WNL Trop T: 0.014(n), BNP 579, Cortisol: 14.48(N), C3 208(High), C4 43(High)
Ocular Fundoscopy: Normal
Imaging:
ECG: sinus tachycardia
2D ECHO:- severe LV GHK, mild concentric LVH, LVEF 24% Mild MR/AR/TR with PASP 40 mm Hg
Venous doppler of both lower limbs: no evidence of DVT seen in bilateral lower limbs
USG whole abdomen: mild hepatomegaly with hepatic SOL, bilateral renal parenchymal changes grade II
US renal artery doppler: grossly normal study.
Renal Biopsy: LM: 12 glomeruli(7 globally sclerosed, 4 viable - mesangial matrix, tubule - mild degenerative changes. Interstitium - focal fibrosis(5-10%), Congo red: Negative. Progressive glomerulosclerosis. IF: No glomerular deposits(IgG/M/A/C3/C1q/Lambda)

Dx: Possible secondary focal glomerulosclerosis (FSGS) with uncontrolled HTN (primary vs secondary), T2DM & HfrEF

Problem Representation: A 33 year old morbidly obese woman with history of chronic htn, T2DM and 2 complicated C-sections in the past, presented with shortness of breath and dry cough for a week, ECHO s/o reduced EF, nephrotic range proteinuria and progressive glomerulosclerosis.

Teaching Points (Hee Mun): 33-year-old presenting with a subacute (7-day) history of progressive shortness of breath and dry cough; young age raises concern for non-traditional etiologies.(obesity) Assess for orthopnea (cardiac vs diaphragmatic causes), PND, and ascites. **Ask about pregnancy history(complicated by hypertension)**, including any complications such as preeclampsia or peripartum cardiomyopathy. HELLP syndrome-> lab

Preeclampsia : New-onset hypertension (≥140/90 mmHg after 20 weeks gestation) plus either proteinuria (≥300 mg/24h or protein/creatinine ratio ≥0.3) or signs of end-organ dysfunction(example liver enzyme)—particularly concerning in a patient with history of APLS, lupus (three miscarriages), and complement deficiency involving the alternative pathway(TMA)

JVP elevation and crackles suggest volume overload, possibly from cardiac or renal causes(GN, TMA(TTP)); evaluate with Hb,PC,liver enzymes, UA; in **young obese patients with HTN,** consider secondary causes like Cushing syndrome, **Uncontrolled hypertension and tachycardia** raise concern for Takotsubo cardiomyopathy ,pheochromocytoma

UA with proteinuria, elevated BUN/creatinine, high BP, albumin 2.9 g/dL, and edema suggests early nephritic or nephrotic syndrome; evaluate for lupus and glomerulonephritis and vasculitis with ANA, DS DNA, C3 C4, APLS, ANCA, ig A kidney biopsy (after BP control), and obtain ECHO to assess cardiac function.**Secondary HTN workup** includes (aldosterone-renin ratio), renal artery stenosis), urinary free cortisol), and TSH

In a DM patient with 3+ proteinuria, perform renal US to assess structural disease; consider preeclampsia, GN, TMA, SLE nephritis; obtain echo to evaluate for tachycardia-induced CMP, pheo-induced CMP, ischemia, or HTN heart disease.-> ECHo **DM, HTN, obesity, or preeclampsia suggests CKD;** evaluate CR baseline, consider **renal biopsy**, serologies, Secondary HTN w/u,diabetic nephropathy, and with LVEF 24%, assess for ischemia or CM(->cardiac catheterization)
Diabetic nephropathy (biopsy)shows mesangial expansion, thickened GBM, Kimmelstiel–Wilson nodules, tubular atrophy, h**yaline arteriolosclerosis (HTN)/ FSGS ->**SGLT2i, GLP-1 RA, and MRA optimize renal protection in CKD/DM->Cystatin C assess renal function,