9/25/26 Morning Report with @CPSolvers

"One life, so many dreams" ***Case Presenter****: Maddy(@)* ***Case Discussants****: Rabih(@) & Reza(@)*

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

Scribing (Lukas):

CC: 58 yo woman p/t ED w concern of lower leg swelling, SOB while normal walking for 2 weeks

HPI: progressive fatigue, weight gaining (unclear how much), Orthopnea

ROS: no CP, no fevers, no night sweats, no sick contacts, no associated event, no rashes, no joint pain

Echo a few years back:
PASP 52
Echo 2 months prior:
EF 56%, RV severely dilated, RA severely dilated. PASP 32
→ never had right heart cath

PMH:
Moderate OSA
-> can't tolerate CPAP.
Only nasal cannula 2/l at night
PAH most likely Group 3
Arterial hypertension
T2DM
hyperlipidemia

Meds:
Atorvastatin
Lasix 40 mg (missed 3 doses prior)
Lisinopril

Fam Hx:
Non contributory

Social Hx:
Non contributory

Health-Related Behaviors:
No tobacco, no alcohol

Allergies:
none

Vitals: T: afebrile **HR**: 80s **BP**: 120/860s **Sat**: mid 90s 3l o2 nasal
Exam: Gen: well appearing, alert and oriented, able to talk
CV: no obvious murmurs, jugular venous distention
Pulm: lungs clear, no wheezes
Extremities/skin: 2+ pitting edema up to bilateral knees
no rashes, no joint swelling, no cutaneous scleroderma

Initial Labs: **1. Vbg:** ph 7,36, pco2 72 HCO3: 39 **2. VBG:** ph 7,3 pco2: 64
Trop: mildly elevated **NT-pro-BNP:** 4000

ECG: no ischemic changes

CXR: cardiomegaly with pulmonary vascular congestion

CTPE: no PE, marked pulmonary arterial enlargement and right heart dilatation. Septal flattening and contrast reflux into the hepatic veins → got admitted, given diuretics

Echo: concern for severe pulmonary hypertension PA systolic pressure of at least 85. EF 60%. RV severely dilated, moderately reduced systolic function. RA severely dilated with interatrial septum bowing into the left atrium.

Course: diuresis, right heart cath planned for severe PAH and risk factors

Right heart cath: mean pulmonary artery pressure 47, PVR 4.13 (elevated). Pulmonary capillary wedge pressure 9 (normal); oxygen saturation SVC 90% (elevated, normal 70-75%) suggesting right to left shunt

Labs: ANA, RF, CCP, scleroderma testing negative

Recap CTPE: 2 pulmonary veins draining into the SVC

Dx: PAPVR (partial anomalous pulmonary venous return)

Problem Representation: 58 yo woman with known PAH, OSA and other comorbidities presents to the ED with SOB and lower leg swelling for 2 weeks who missed her Lasix medication at home turned out to have PAPVR as the cause of PAH

Teaching Points (Varsha)

- **SOB and lower limb swelling** → acute decompensated HF
- **Past medical history relevance:** Risk profile → patient with CKD → reduced reserve to take an insult → increased risk for acute on CKD, similar with dementia → increased risk of AMS, OSA → increased risk for pulmonary HTN, volume overload and HF
- **Problem representation:** Is it decompensation of a chronic problem or is it an acute onset disease → think of the acute onset → to rule out sinister pathologies
- **Pulmonary Hypertension:** elevated pulmonary artery pressure
  - Pressure = flow and resistance
    Anatomical approach: Pre- capillary VS post capillary
  - low wedge pressure - >> precapillary cause (lungs) Vs left side heart disease
  - Etiology: Type 1 - Pulmonary arterial disease, type 2 - Heart, type 3 - Lung, type 4 - chronic thromboembolic disease, type 5 - Sarcoidosis
- SVO2: How much tissue oxygen extraction there is
- High O2 in SVC? → Post pulmonary circulation connection to the SVC → Left to right shunting → Partial anomalous pulmonary Venous Return