9/25/20 Morning Report with @CPSolvers

Case Presenter: *Rafael Medina (@Rafameed)* ***Case Discussants***: *Rabih Geha (@rabihmgeha) and Reza Manesh (@DxRxEdu)*

CC: Dyspnea in exertion and abdominal distension

HPI: 31 M p/w dyspnea due to physical activity then progressed to minimal activity associated with orthopnea. In the past three months, he lost 7 kilos of weight associated with lack of appetite. He had distended abdomen. Recently developed dry cough, pericardial chest pain and episodes of syncope. He denied fevers (temperature was not measured), chills, nausea, vomiting of other symptoms

PMH: None

Meds: None

Fam Hx: None

Soc Hx: Born and raised in Brazil. No recent travel

Health-Related Behaviors: Smoked for 3 years. Drinks socially. No drug abuse. Fisherman since 15y

Allergies: None

Vitals: **T**: 37.8 **HR**: 128 **BP**: 100/80 **RR**: 27 **SpO_2**: 95

Exam:

Gen: Respiratory Distress, fatigued, malnourished, elevated JVP, pallor or oral mucosa

HEENT: Normal

CV: Holosystolic murmur in left sternal border that augmented with inspiration. Allowed pulmonic component fixed S2 combined with ventricular gallop

Pulm: CBTA

Abd: Hepatosplenomegalia, positive Hepatojugular reflux, dilated umbilical veins

Neuro: Normal

Extremities/Skin: 2+ edema in both legs. no rash, no lesions

Notable Labs & Imaging:

Hematology: WBC: 8600 (15% eosinophils) Hgb:11.5 Plt:N

Chemistry: Na: 138 K: 5.5 Cl: 104 Cr: 0.9

AST: 53 ALT: 58 Alk-P: N T. Bili:N Albumin:2.6 PT:normal

HIV, HBV, CMV,HCV: negative

Paracentesis: SAAG 1.4 (High)

Imaging:

EKG: Sinus rhythm and atrial and ventricular overload. Axis deviation to the right

ECO: EF of 77% with significant increased in R chambers, pulmonary systolic fraction of 88. MAP: 46 Tricuspid valve with moderate incompetence

ABD US: Pulmonary hypertension, ascitis, portal fibrosis

CXR: Enlarged R atrium and ventricle. ENlarged pulmonary

Chest CT: Pulmonary thromboembolism in both lungs

Serology: Schistosoma mansoni

Patient treated with Praziquantel and sildenafil.Negative a month later

Problem Representation: 31 M p/w dyspnea in exertion and abdominal distension. He had hepatosplenomegalia, positive Hepatojugular reflux and dilated umbilical veins. DX: Schistosomiasis

Teaching Points (Priyanka):

- **How to approach multiple concerns, each with an extensive schema**- start with the shortest, is it fundamental to the case?
- **SOB, orthopnea, syncope**: Dyspnea pyramid- start with cardiac (HF, ACS, arrhythmia) and pulm causes (airway, alveoli, vascular, pleura). Linking syncope and SOB, orthopnea points towards cardiac etiology.
- **Abdominal distension**: "phases of matter" solid (enlarged organ, backed up stool), liquid (fluid in peritoneum, ascites), gas. Abd distension→ can cause poor appetite
- **Pt with no pmh**: approach to new disease/ onset of disease vs decompensated disease changes diagnostic and management pathway (tx could be more aggressive with new dz)
- **Elevated JVP**- R sided HTN
- **LLSB murmur** → TV→ TR. All R-sided murmur increase with inspiration, increase flow across diseased TV and augments murmur. Is this functional TR? Loud pulmonic component suggests pulmonary HTN and RV disease.
- **Splenomegaly-** water, molecules and cells. MC cause is portal hypertension. Can be cirrhotic or non cirrhotic.
- **Pulmonary HTN-** Right heart cath MAP >25. 1 (pulm arterial- malignancy, infection HIV/schistosomiasis, metabolic), 2 (L- sided heart disease; only post-capillary cause), 3 (lung disease/hypoxia), 4 (CTEPH- one reversible cause of pulm HTN), 5 (pulm HTN of uncertain cause). *all* are prone to pulmonary thrombus formation.
- **Eosinophilia-** Primary or Reactive (infxn, cancer, AI, allergies, adrenal insufficiency). Bacterial and viral infections with eosinophilia are less common.
- **High SAAG**= portal HTN. Cirrhotic vs non cirrhotic (pre hepatic or post hepatic)
- **CTEPH**: malignancy? - lymphoma, hodgkin, testicular cancer in young male.
- **Schistosomiasis and pulm HTN -** egg travels to portal vein→ periportal fibrosis**-> shunting of blood into pulm vessels→ eggs dislodge in pulm vasculature → granulomatous inflammation→ causing pulm HTN -- chronic process