5/31/26 Morning Report with @CPSolvers

"One life, so many dreams" ***Case Presenter****: Krishna(@)* ***Case Discussants****: Kirtan(@) & Magnus(@)*

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

Scribing (Siva)

CC: 21 yr male b/l pedal edema progressed to generalized body swelling for 1.5 months ,exertional SOB since 10 days,decreased urine output since 10 days ,Fever-1 day, cough with sputum production

HPI: Exertional SOB started 6 months ago a/w palpitations and nocturia; B/l pedal edema progressed to anasarca.Over last 10 days SOB progressively increased .Decreased UO .One day prior developed fever a/w burning micturition without chills or rigors.Reported Cough with whitish non foul smelling ,non blood tinged sputum

ROS: Negative

PMH:-none

Meds: None

Fam Hx: —

Social Hx: chronic alcohol use disorder since 6 years (documented toddy use), smoker ,tobacco chewer

Allergies: —

Vitals: T: nl **HR**: 118 **BP:** 80/60 mm Hg **RR**:20 **Sat**:99%@RA

Exam: CV: B/l Pitting edema with scrotal and pedal edema. Normal heart sounds.JVP elevated.

Pulm: B/l basal crepts +ve

Abd:distended,no organomegaly

Notable Labs & Imaging:

Hematology:

WBC: 12.09 Hgb: 13.3 Plt:129 MCV:

Chemistry:

Na: 125 K: 4.27 Cr:1.53 BUN:80 Ca: 10.39 Mg:2.3

AST:212 ALT:165 GGT-225 Bili: 1.65 Albumin: 2.8

ESR: Normal CRP: 10.6→18 LDH: 346

Uric acid: 7.7,pro cal-5.7,B12-529

Nt pro BNP-6k; **Ferritin: 52.9—>1600;**

B/C-Stenotrophomonas maltophilia(did not grow in urine)

U/C-bacteria +ve,no protein.

Persistent soft BP throughout the hospitalizations-received vasopressors

Imaging:

USG abdomen- edematous gallbladder wall,moderate ascites

CXR:b/l costophrenic angle blunting with basal atelectasis

Echo:global LV hypokinesia, LVEF- 10-15%,dilated chambers,mild to moderate AR,MR,TR.

Pericardial effusion,IVC-2.1 cm with <50% inspiratory collapse.

Cardiac MRI-LV dilatation, no delayed enhancement.

Dx-Dilated cardiomyopathy probably secondary to genetic(not tested) /alcohol related.

Problem Representation:21 yr old male with h/o chronic alcohol abuse presented with chronic progressive anasarca and decreased urine output has been diagnosed with DCM probably secondary to underlying genetic mutations with toxic(alcohol) exposure.

Teaching Points (Ramaswamy)

Dyspnea pyramid - Pulmonary, cardiac, anemia

Fever with associated cough, SOB *=>pulmonary infection more possible than cardiac infection*

B/ L LL Edema =>

- Cardiac vs renal vs liver usually ; additional edema of abdomen + face => ? Nephrotic syndrome; Low BP - gives pause - consider heart involvement.

Dec urine output =>

- Dehydration (pre-renal AKI) vs concomitant renal process; decreased output + pedal edema => likely intra renal due to retention salt and water; *tempo matters*

Blood pressure *=> High BP in intrinsic kidney issue unlikely to be heart issue, Lower BP in heart failure or cardiorenal issue (intrinsic cardiac issue)*

Pulmonary infection + intrarenal AKI *=> Antibiotic induced, immune complex mediated disease (PSGN), IgA nephropathy*

Alcohol alone *=> Cirrhosis at 21 with overt edema + pulmonary edema - unlikely*

Approach to cardiac involvement - endo, peri, myo(myocarditis, toxic), valvular pathology (tumor, thrombus)

- CHF => nocturia
- Septal defects - can serve as a nidus for IE
- Shock; ICU => acute insult - low EF; In this case low EF + global hypokinesis of LV is s/o true dysfunction; assoc with functional valvular abnormalities
- Cardiac MRI -> helps differentiate true genetic CM vs myocarditis ; confirmation through genetic panel
- Genetic cardiomyopathy => no clear Rx for all types; influences family planning/ lifestyle modification (smoking, alcohol)
- EF<35% -> requires ICD due to arrhythmias

Approach to complex labs *- Differentiate cause vs consequence*

- Renal dysfunction can always be a consequence of heart pathologies; similarly *congestive hepatopathy => can explain elevated liver enzymes in setting of cardiac disease*

Low Na in the setting of liver/cardiac disease *=> s/o mortality/severity*

Mild low Plt can be considered in the setting of ALD

Elevated BNP => old patient - expected in case of heart disease or as a consequence of any disease; young patient - signifies direct myocardial injury => prompts TTE to identify myocardial disease

S.maltophila => can be infection, considered in immunosuppressive states(neutropenia), major organ failure, COPD, CHF. **Alcohol abuse** => immunosuppression => atypical infections

DR precedes DN in T1DM; similarly alc abuse => liver dysfunction precedes heart