06/13/22 Morning Report with @CPSolvers

***Case Presenter**:Shreyas Venkataraman (@this_is_svenka) **Case Discussants**: Andy McCullough (@DrAMcCullough)*

CC: SOB and chest tightness

HPI: 75 yoF with PMH of colon cancer in remission, CKD, DM2, and COPD
P/w long-standing SOB that acutely worsened 2w ago
Inhalers did not work
Denies PND, abdominal distension, fever, chills, chest pain on exertion , change in sputum .Need to sleep with 2 pillows.
Long-term cough
Recently admitted for worsening dyspnea and treated for COPD exacerbation - discharged with lasix (40 daily), nebulizers, and antibiotics

PMH:
COPD
Colon cancer in remission
CKD
DM2
PSH - hemicolectomy - 16yo ago
Meds:
Aspirin
Atorvastatin
Amlodipine
Lisinopril
Glipizide
Spririva
Albuterol

Fam Hx:
Mom with DM
Dad healthy
Soc Hx:
Denies alcohol
Used to smoke
Health-Related Behaviors:
Not sexually active
Allergies:
Sulfa

Vitals: **T**: **HR**: 120 **BP**: 120/60 **RR**: 24 **SpO_2**: 97 on 2L
Exam:
Gen: SOB, speaking in short sentences
HEENT: NCAT, MMM, anicteric
CV: RRR, nl S1/S2 , no murmur, rub or gallop, JVP not elevated
Pulm: bi crackles t mild posterior lungs
Abd: normal BS, soft, NT/ND
Neuro: no gross neurological deficits
Extremities/Skin: warm, well perfused, equal pulses in LE, warm and dry skin

Notable Labs & Imaging:
Hematology:
WBC: 7.4 Hgb: 12 Plt: 156
Chemistry:
Na: 139 K: 4.9 Cl: 100 CO2: 28 BUN:29 Cr: 1.46 (baseline - 1.2)
Glucose: Ca: 10.2 Phos: Mag: 2.1 AST: 57 ALT: Alk-P: 109 T. Bili: 1.4 **Further testings**
Serial troponins 140 - 180 - 160 (plateau) - elevated
ECG - sinus rhythm with occasional PV complexes
LV hypertrophy with QRS widening and repolarization abnormality
CXR - b/l pleural effusion with b/l hilar lymphadenopathy
CT chest PE - mild new patchy GGO and no PE
Basilar predominant honeycombing w/ traction bronchiectasis - UIP pattern pulmonary fibrosis
Mediastinal and hilar lymphadenopathy
TTE - normal LA, normal RV cavity size, LV cavity size markedly elevated.
EF 20% and eccentric LVH. No LV thrombus / Normal inferior vena cava. Normal aorta. Small pericardial effusion. Reduced diameter of the inferior vena cava
SPECT scan - large size, moderate severity perfusion detect with severe global hypokinesis
PET/CT - diffuse patchy FGD uptake most intense in the apex and papillary muscles - reduced perfusion

Final dx - cardiac sarcoidosis

Problem Representation: Elderly man with a PMH of colon cancer in remission, CKD, DM and COPD with progressive subacute dyspnea found to have tachycardia, elevated troponins, b/l pleural effusions and hilar LAD, UIP and decreased EF

Teaching Points (Samy):

- Dyspnea: vast DDx -> rule out acute life threatening events (4+2+2): ACS, aortic dissection, takotsubo, tamponade, pneumothorax, PAE, esophageal impaction and rupture
- SOB due to coronary disease: increased LVEDP and coronary malperfusion -> ask for typical symptoms of angina (chest pressure, radiation to arms/neck, exacerbated by exercise, relieved with resting/nitro)
- Dyspnea in a pt with cancer: direct effect of cancer (infiltration, obstruction, effusion), paraneoplastic syndromes (PE, immunosuppression, marantic endocarditis) and side effects of treatment (radiation, drug toxicity)
- Common cardiac causes of dyspnea: exertional dyspnea -> CAD vs. congestive symptoms (LE edema, ascites, elevated JVP) -> HF
- Lung crackles (wet vs. dry): atelectasis, interstitial lung disease (IPF, connective tissue disease associated, sarcoid and HP) and pulmonary edema
- Chest pain with elevated, but stable troponins -> suggests stable coronary perfusion -> ECG, echo, consider stress testing
- Narrow pulse pressure (<25% of systolic BP): decreased cardiac output -> increased vascular resistance; normal pulse pressure -> appropriate cardiac output vs. decreased vascular resistance; high pulse pressure -> aortic insufficiency, atherosclerosis, high-output states,, coarctation of the aorta
- Elevated troponins: decreased supply (CAD, MINOCA), increased demand (sympathetic effect/toxicity) and myocarditis/infiltrative diseases
- SR: positive P-wave I, II, V5 and V6 -> non sinus atrial rhythm (low in the atrium) or lead switch
- STD do not localize ischemia, BUT indicate ischemia! TWI localize ischemia!
- Pathologic Q-waves indicate subacute/old myocardial infarction, also loss of R-waves
- Enlarged cardiac silhouette on CXR: pericardial effusion vs. cardiomegaly
- UIP (honeycombing and traction bronchiectasis) DDx: IPF, connective tissue dz, AAV, HP
- Sarcoid: patchy distribution of myocardial scars -> MRI, PET-CT, in comparison to amyloidosis a neg. biopsy does not rule it out! -> look for chronic cough, hilar LAD, cutaneous manifestations, uveitis, arthritis, hypercalcemia, low EF (non-ischemic CMP), arrhythmias (esp. epicardial VTs), sudden cardiac death (-> ICD)
- Base rate is key: always rule out CAD in older patients with risk factors even if the presentation is atypical before considering rarer diagnoses!
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