5/19/26 POCUS VMR with @CPSolvers

"One life, so many dreams" ***Case Presenter****:Jeffrey Kott (@)* ***Case Discussants****: Ravi(@rav7ks) & Deb (@deboracloureiro)*

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

Scribing (Krishna)

CC: 81 y F with Shortness of breath with exertion

HPI: Several days of shortness of breath with exertion.

ROS: Positive for Dyspnea with exertion-relieved with rest
No Fever, chills, palpitations, sick contacts, orthopnea, PND, lower extremity swelling

PMH:
Afib
SLE
Mild Mitral regurg
Hypothyroid
Overactive bladder
Recent Routine left hip arthroplasty(POD 16)

Meds:
Eliquis 5 mg qAM / 2.5mg qPM
Estradiol patch
Amlodipine
Levothyroxine
Losartan
Metoprolol tartrate
Omeprazole
Paroxetine

Fam Hx:
Noncontributory

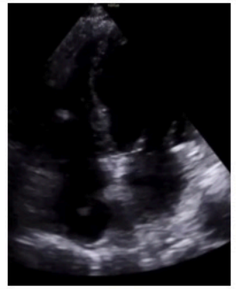
Social Hx:
Lives alone, independent in all ADLs/IADLs

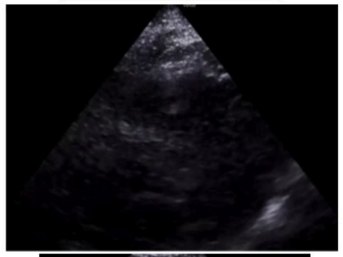
Health-Related Behaviors:

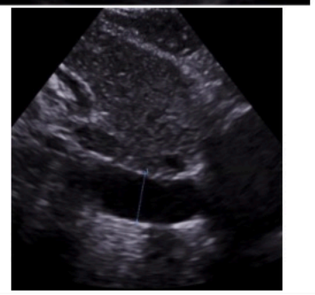
Allergies: None

Vitals: T: 99.3 **HR**: 110-120 **BP**: 110-140/90 **RR**: **Sat**: 94 on 3l NC
Exam: Alert and oriented, no acute distress
Lungs: Crackles bilaterally at the bases, no wheezes/rhonchi
Cardiac: Irregularly irregular rhythm, tachycardic, + holosystolic murmur +JVD
Abd: Soft, nontender, nondistended
Neuro: No gross focal deficits
Skin: Surgical site with minimal bruising, otherwise C/D/I
Extremities: No obvious pitting edema (though in compression stockings)

Notable Labs & Imaging:
Hematology:
WBC: 10.7 Hgb: 8 (baseline 8.4) Plt: 464 MCV:
Chemistry:
Na: 136 K: 4.6 Cl: HCO3: 19 (AG: 13)
Cr: 1.02 BUN: 22 Glucose:
AST: 41 ALT: 35 Alk-P: 168 Bili: 1.1
Trop: 17→ 16
BNP: 4913
Imaging:
EKG: Afib with RVR
CTPA: segmental/subsegmental PE with diffuse GGO
POCUS 4 Chamber view:
Hyperechoic structure in RV wall,
Negative McConnells, D-sign, 60/60 sign
Dx: Non-hemodynamically significant PE + ADHF with severe MR and Afib with RVR







Problem Representation: 81 year old female with PMH of MR, afib came with shortness of breath with exertion over several days with subsegmental PE on CTPA with diffuse central GGO and elevated BNP; showing no signs of RV strain (Negative McConnells, D-sign, 60/60) on POCUS.

Teaching Points (Glen)

-Dyspnea: ANATOMICAL Cardiac? (ACS, A fib[meds not optimsed], HF) resp?(PE [post op],PNA, COPD).
-Dyspnea on exertion: Cardiac[HF]
-Eliquis(apixaban): lower dose and risk of coagulation (plus polypharmacy).

-Exam: tachycardic with nl bps > PE. Holosystolic murmur > MR,TR
-A fib: from meds? Chronic PE?
-Elevated JVP: right sided HF? Crackles bilaterally could mean Pulm edema from left sided HF[elevated troponin]. cause from Afib?

-Low HCO3: acidosis or compensated resp alkalosis(get blood gas).
-EKG: look for sinus tachy, S1Q3T3, bt findings were of a fib.

-Echo markers of PE: RV:LV ratio>1, McConnell Sign: Akinesis of RV wall, D-sign[Septum flattening because of pressure changes]. Clot in Transit.

-How to make Progress: Echo signs can also be seen in chronic PE. If hemodynamically unstable or RV strain signs you can escalate tx.