04/23/24 POCUS Morning Report with @CPSolvers

Case Presenter: Dr. Renee Dversdal (@DRsonosRD) Case Discussants: Yazmin (@minheredia), Ibrahim (@IbrahimOmer_) and Ravi (@rav7ks)

CC: 60 yo F acute on chronic SOB with cough.

HPI: Normally can walk one block, but for the last 3 days, she has been dyspneic doing dishes and going to the bathroom.

She also had cough with yellow sputum for the past 5 days. Stable LE edema, no chest pain, no fever, no other complaint.

Patient skipped her diuretics due to personal trip.

PMH: COPD, Ischemic cardiomyopathy, CAD, past EF 40% (6m ago), morbid obesity (BMI 40-45)

Meds: LABA, BB, statin, furosemide 40mg, aspirin

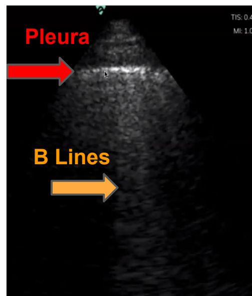
Fam Hx:
Soc Hx:
Health-Related Behaviors:
Allergies:
All above non-contributory

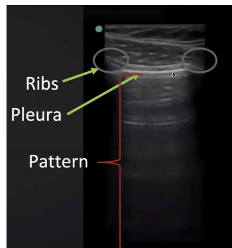
Vitals: T: afebrile **HR:** 95 **BP:** 148/88 **RR:** 20 **SatO2: 89% RA (Baseline 92%)**

Exam:
Gen:
CV: no murmur, no S3, no JVP,
Pulm: distant breath sounds, crackles on bases, mild expiratory wheeze
Extremities/skin: 1+ bilateral LL edema below the knee

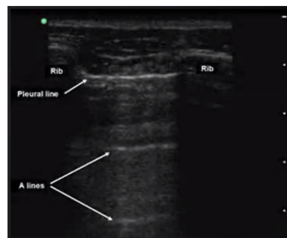
Notable Labs & Imaging:
Hematology: unremarkable
Chemistry: unremarkable
Troponin: neg

Imaging:
CXR: Suboptimal exam due to body habitus
Lung US: Multiple B-lines.





Educational image, not related to current case



Educational image, not related to current case

Dx: Acute on chronic systolic Heart Failure
Patient was treated with diuretics

Problem Representation: 60 yo F with PMH of COPD, ICM, CAD, HFrEF and morbid obesity who present with progressive SOB. She was hypoxemic and OCUS showed signs of pulmonary congestion. She was found to have acute on chronic systolic HF.

Teaching Points (Vijay):
-Dyspnea: Cardiopulmonary favored by acute h/o + edema
Chest wall, Lung(airway, parenchyma,alveoli, pleura, vascular), Heart(pericardium, myocardium, endocardium)
- Exacerbation of COPD, HF - Triggers as possibilities
(**FAILURE:** meds, anemia, infection/ischemia, lifestyle, Upregulated cardiac(Thyroid), Renal failure, Emboli)
Exam: Fluid status, HJR
Low SO2: Compare with baseline. New = ↓Diffusion, Perfusion, Ventilation. Need for LTOT
Lung POCUS: Rib, Pleura, Pattern
A: **Air -** Across - Horizontal (Reverberation artifact)
-Physiologic / Free Air
-Non-A Non-B = Off Axis(Perpendicular)
-Slide, Rock, Fan
B: sponge, air + Higher density, **Bottom**: >3/rib space = **Pathologic**
-Diffuse: >2 zones = Systemic
-Focal: Contusion, Pneumonia, infarct, Malignancy
-Min depth: 12cm (Confirm B lines)
CLUE: Cardiovascular Limited Ultrasound Exam
"Quick Look" signs in same ***specific order***(LV⟶ RA)
PLAX(LAE, LV dysfn)-->B-lines⟶Effusion⟶RV function, IVC
IVC: Not always Fluid Status!
No US finding makes a diagnosis-Look at all pieces

CARD: Common things, Atypical presentations, Rare are cool, Don't miss diagnosis