



1/27/26 POCUS VMR with @CPSolvers



"One life, so many dreams" Case Presenter: Dr. Christian España Schmidt, Dr. Stephanie Connor Case Discussants: Ravi (@rav7ks) & Eugene (@EugeneBondzie)
<https://clinicalproblemsolving.com/present-a-case/>

Scribing (CPS team)

CC: 77 y/o M w/ SOB and Afib w/ RVR

HPI: 77M had worsening SOB -> now p/w acute hypoxia, hypotension and Afib with RVR.

Dependent on ADLs. Reported cough with eating. Required persistent 3L NC on admission [new].

-> admitted, IV ABx started for CAP coverage [ceftriaxone + azithro -> Zosyn]
Limited goals of care to DNR / DNI. started on DVT prophylaxis.

PMH: Dementia

Social Hx: living in a nursing home
Dependent in ADLs

Vitals: T: afebrile HR: nl BP: RR: Sat: BMI: 3l Oxygen
Exam: Gen: Lethargic
CV: RRR Pulm: coarse breath sounds bl Abd: unremarkable
Neuro: oriented to self only, lethargic Extremities/skin: no edema

Notable Labs & Imaging:

Hematology: WBC: 12.5

Troponin: nl, BNP: nl EKG on admission: normal sinus rhythm

CXR: bl LL consolidations c/w PNA

CT chest (1 d before admission): bl LL PNA [R > L], intraparenchymal abscess on the Rt

-> rapid response called for hypotension, worsening O2 requirements, Afib with RVR in 120s and received 1L IVF

Exam stable from admission.

POCUS [5 chamber view]: decrease LV function, evidence of diastolic dysfunction [enlarged atria], no valvular abnormality

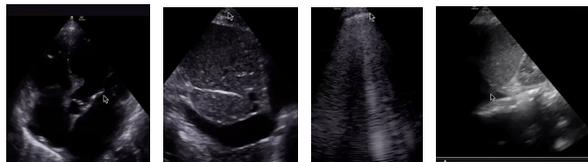
POCUS [IVC]: > 2 cm, inspiratory collapse < 50% > signs of congestion

POCUS [lungs]: vertical B lines (diffuse, bl, from pleura to lung) -> pulmonary edema

POCUS [RUQ]: pleural effusion

Course > started on amiodarone drip > he Improved in terms of (HR: 100 and BP (90s) > improved Mental status. Outcome: patient passed away in the hospital.

Dx: Cardiogenic fluid overload and Afib w/ RVR



Problem Representation: 77YO M w/ PMHx of dementia living in a nursing home, DNR, p/w/ SOB and Afib w/ RVR, HypoTN, POCUS showed: LV dysfunction, and fluid overload (dilated IVC, IJV, pulmonary edema, and pleural effusion).

Teaching Points (Saketh)

1) Patient with hypotension + A-fib w RVR: Etiology of Shock - Cardiogenic, Obstructive, Distributive
Cough + SOB + Hypoxia: Lung COG

Afib w RVR: could be a compensatory rhythm

2) Abscess: Usually implies a more subacute course and aggressive infection

3) ECHO (5 chamber view):

Decreased squeeze of LV (impaired contractility)

Enlarged LA: likely diastolic dysfunction -> Explains the A-fib

IVC (long axis): Use the Hepatic Vein as a landmark

Dilated IVC, Inspiratory collapse of the IVC < 50%: Likely Congested.

- Less likely to be fluid responsive

Lung USG:

-Multiple Diffuse B/L B-lines: Classically seen in patients with pulmonary edema, multifocal pneumonia.

-Normal sliding of Pleura rules out a pneumothorax

4) Think about Rate control of Arrhythmia in a patient with A-fib + Hypotension and Congestion picture.