

# 5/14/25 Morning Report with @CPSolvers

"One life, so many dreams" Case Presenter: Bahae Elkhayyat Case Discussants: Ethan (@e\_chiu17) and Sharmin (@Sharminzi)

Dx

The Clinical Problem Solvers

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Scribing (Bayan)

**CC:** 60F presenting in Respiratory distress. SpO2 75%, RR 40 and skin marbling

**HPI:** Patient was agitated and required intubation and sedation w/ propofol and midazolam on admission. Developed hypotension refractory to dobutamine and norepinephrine.

Later extubated and mental status improved.

**ROS:** -

**PMH:** COPD

**Fam Hx:** -

**PSH:** -

**Meds:** -

**Health-Related Behaviors:** smoker

**Allergies:** -

**Vitals:** T: afebrile BP: 160/96 -> 80/54 (despite norepinephrine and dobutamine)

**HR:** 195 **RR:** 40 **Sat:** 75 on RA -> 92% on 15L **BMI:**

**Exam:** **Gen:**

**HEENT:**

**CV:** cold extremities. Prolonged capillary refill (>5 sec). Muffled heart sounds. No JVD or murmurs

**Pulm:** B/l crackles.

**Abd:**

**Neuro:** GCS 10. Agitated. Pupils reactive. No focal deficits.

**MSK:** cold and mottled extremities.

## Notable Labs & Imaging:

### Hematology:

WBC: nl

### Chemistry

Lactate: 7 ABG (post-intubation): pH 7.16 pO2 143 pCO2 43

Troponin 800 BNP 20,600 CRP 38

### Imaging:

EKG: diffuse ST elevations

CXR: pulmonary edema and b/l effusions

CTA: No PE. b/l pleural effusion

Echo: LVEF 23%. Apical thrombus. Global hypokinesia

Coronary Angiography: Occlusion of LAD.

**Dx : Cardiogenic shock 2/2 to ACS**

**Problem Representation:** 60F smoker w/ hx of COPD presenting with respiratory distress and shock.

## Teaching Points (Rahul):

**Dyspnea pyramid:** Cardiopulmonary system abnormalities

**Dyspnea with desaturation:** Issue with Alveolar capillary membrane.

**Stabilization first(ABCDE) :** HFNC/BIPAP- intubation( Hemodynamics + AMS)

**Skin Marbling:** Livedo reticularis.

**Hypotension + Hypoxemia:** Suggestive of Intrathoracic HTN( Pneumo, get an CXR, limit fluids)

**Hypoxemic RF:** Alveolar, vascular, effusion

Prolonged capillary refill + not responding to vasopressors: "shock" ( Cardiogenic/ obstructive/ hypovolemic/ distributive)

Given the COPD, there is risk of cor pulmonale.

EKG, ABG, BNP would be helpful.

**Cardiogenic features:** elevated JVP, crackles on exam? Narrow pulse pressure

Wet beri beri( thiamine deficiency can be considered) - IV thiamine ( Hyper acu HF)

**Tachycardia:** Sinus tachycardia/ SVT( A.fib/ flutter).and expected for low SV.

**Muffled heart sounds:** tamponade, obesity, COPD

Intubation in preload dependent pts is risky( causes elevated intrathoracic pressure)

- Next steps: ECHO(RV strain/ effusions)

**Lactic acidosis:** Lower perfusion. Acidosis on ABG- measuring AG would be helpful.

Looking at Ventilator settings ( Fio2, given the PaO2: 143)

**Elevated troponins:** Type 1 MI vs type 2 MI ( supply/demand issue)- trending the troponin and EKG. Endocardial(valve issue)/ myocardial/ pericardial(pericarditis)/ myopericarditis/ ACS

Atrial stretch - high BNP

Pulm Edema + B/L effusions: Heart pathology( ACS/ Takotsubo) - Angiography helps

Takotsubo: Mildly elevated Trops vs significant elevation in Acute MI

If negative angiography, cardiac MRI would be GOLD