



09/15/21 Morning Report with @CPSolvers



Case Presenter: Steph Sherman (@StephVSherman)

Case Discussants: Kirtan Patolia (@Kirtan Patolia) and Jassimran Singh (@Jassimransingh9) and Travis Smith (@RosenelliEM)

CC: Chest pain

HPI: 52 yo woman presents with chest pain during hypotensive episode during dialysis. Reports history of previous bouts of asymptomatic hypotension during dialysis. Felt fine that day, took same home medications. In the middle of the session presented hypotension, associated with chest discomfort, sweating, left sided headache and blurry vision for 5 minutes. Treated with fluid bolus and O2. Sent to ER for further workup.

PMH:
ESRD
known CAD with stents in december 2020 (RCA, LAD), Associated ICM, with recovered EF (55%)
Prior history of Hypertension (resolved after RRT began)
Meds:
DAPT (Aspirin, Ticagrelor)
Metoprolol, Statin, Furosemide 40 mg bid

Fam Hx:
none

Soc Hx:
None

Health-Related Behaviors:
None

Allergies:
None

Vitals: T: normal HR: 50 BP: 110-120/60-70 RR: normal SpO₂: 98%

Exam:
Gen: functional fistula on L arm
HEENT:
CV: regular, slow, no murmurs, no rubs or gallops. JVP 6 cmH2O
Pulm: clear
Extremities/Skin: no edema

Notable Labs & Imaging:
Hematology:
WBC: Hgb: Plt:

Chemistry:
Na: K: Cl: CO2: BUN: Cr: glucose: Ca: Phos: Mag: AST: ALT: Alk-P: T. Bili: Albumin:

Troponins: Initial: 0.05 (cutoff <0.04). Remains 0.05

Imaging:
EKG: diffuse anterolateral (V1-V5, DI, aVF) symmetric deep Tw inversions. Uw
EKG: subsequent EKG remains mostly equal as previous.

Patient remains asymptomatic, normotensive

Problem Representation:
52 yo woman with PMH of ESRD on dialysis and CAD presents with chest pain during an hypotensive episode in her last dialysis visit. An EKG reveals diffuse anterolateral Tw inversions that remain constant in repeat exams as well as normal troponins.

Teaching Points (Kiara):

- **Chest pain:** Rule out emergency first → 4 (ACS, dissection, tamponade, takotsubo cardiomyopathy) + 2 (PE, pneumothorax) + 2 (Esophageal rupture & impaction).Lungs, Heart (Endo, Pericardium), Muscles, Chest wall.
- **Dialysis:** Hypotension can occur during dialysis due to impaired CV compensatory mechanisms or medications (e.g Metoprolol) avoid compensation, dietary or health behaviours.
- **Dialysis for prolonged time:** Infections, uremia (PTH and Phos → cardiac remodeling), pericarditis → pericardial effusion,
- **Concerning meds:** Ticagrelor can trigger dyspnea, prolonged antiplatelet therapy predispose to bleeding.
- **U waves EKG:** Hypokalemia, bradycardia, digoxin, ischemia, LVH.
- **T Wave inversion: Wellens Sd:** T waves inversion symmetrical in precordial leads. Type A (biphasic in V2 V3) and B (deeply inverted T wave) can mean LAD insufficiency. Inversion T waves can also indicate reperfusion “Post- ischemic T waves”, Stroke “Cerebral T waves” prob due to transient cardiac dysfunction, pulmonary HTN (Anterior leads can also reflect RV disease).