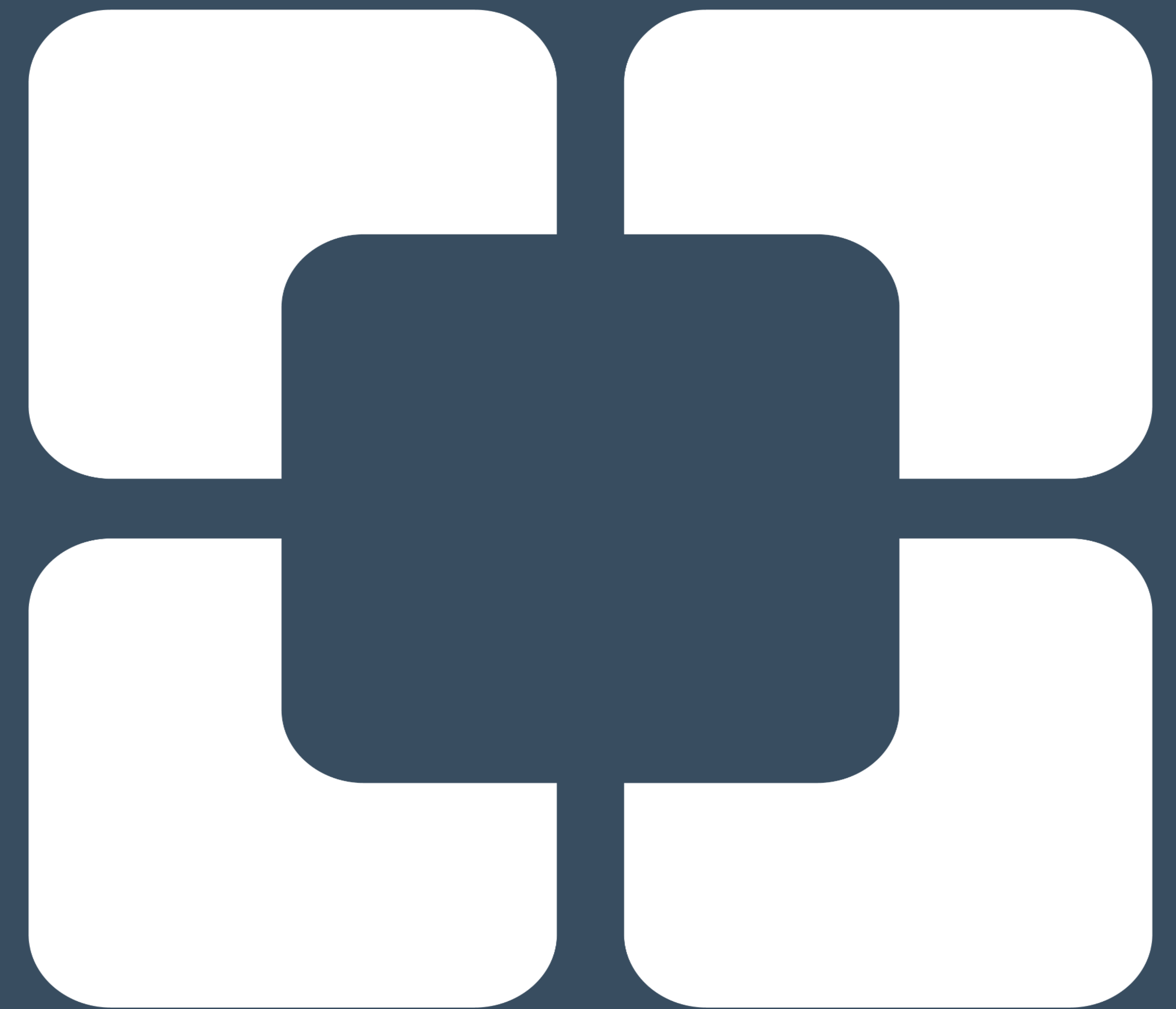


Preeclampsia and Spontaneous Coronary Artery Dissection: A Rare Cause of Postpartum Myocardial Infarction

Fatemeh Ashtari MD, Cholene Espinoza MD,
Manal Hassan MD, Emmarie Myers MD

Department of Anesthesiology



Background

- Pregnancy- associated spontaneous coronary artery dissection (P-SCAD) = spontaneous separation of the coronary artery wall
 - Can occur during pregnancy or the postpartum period
 - 70% within 1st week postpartum
 - caused by intramural hematoma or intimal disruption rather than atherosclerosis or trauma
- Most common cause of myocardial infarction in pregnant and postpartum women
 - 14.5% to 43% of pregnancy-associated myocardial infarction
 - Affect ~1.81 per 100,000 pregnancies
- Tend to have more severe clinical presentation than those with non-pregnancy-associated SCAD

1. Hayes SN, et al. Spontaneous Coronary Artery Dissection. JACC. 2020

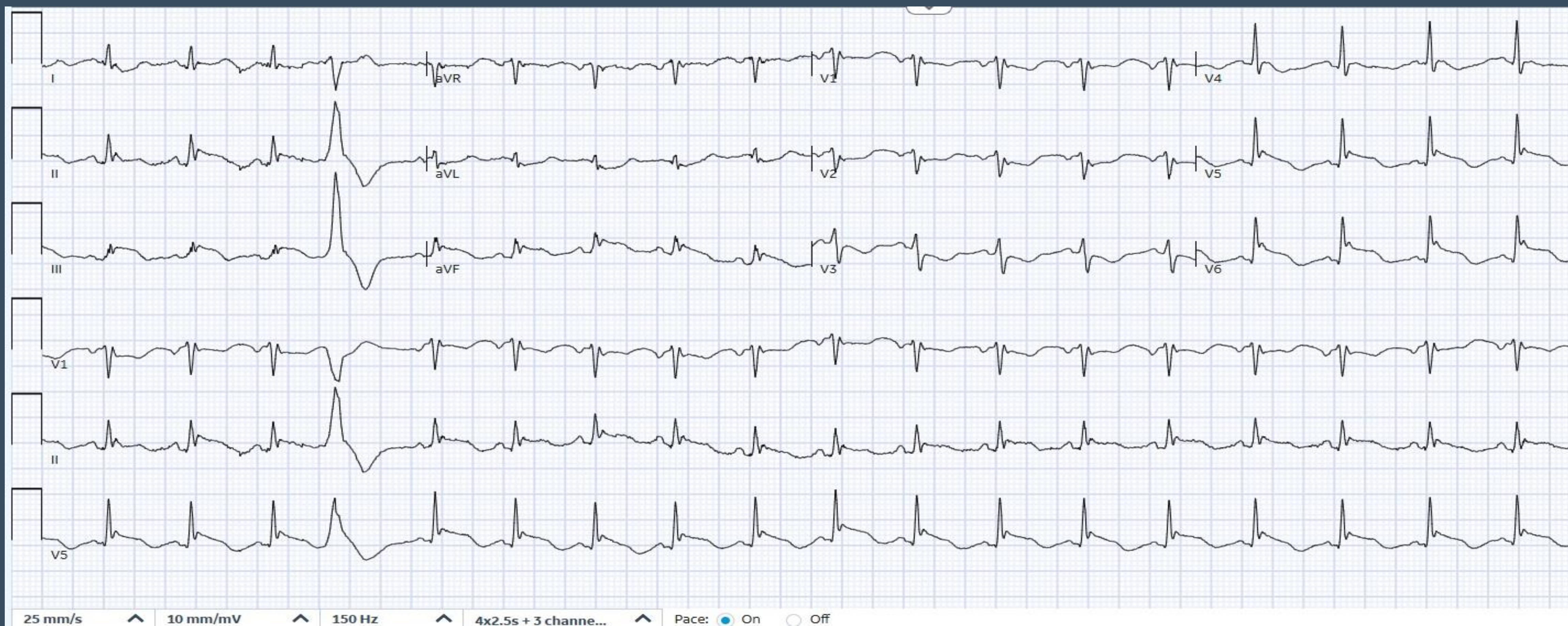
Case

Patient:

- 42-year-old G1P1, IVF pregnancy
- Postpartum course c/b severe preeclampsia, creatinine 1.66mg/dl, peripheral edema(4+)
- Presented on PPD# 6: sudden chest pain, syncope, and seizure-like activity requiring CPR prior to EMS

Course:

- ECG: ST elevation in Inf. & lat leads
- CTA: negative for PE/dissection
- POCUS: abnormal regional wall motion, EF 40%
- Rising troponin level (748 ng/L)
- Emergency CA: 90% occlusion of LAD & 100% LCX
- LVEDP 40mmHg& lactate 4.4 mmol/L concerning for cardiogenic shock → IABP placed
- Urgent CABG for dx P-SCAD
- discharge on POD #8



Learning Points

- Patient had recognized risk factors for P-SCAD: IVF and pre-eclampsia
- Preeclampsia is present in 11% of P-SCAD compared with 3.4% in the general population, and fertility treatment in 28% versus 12%
- P-SCAD tends to be more severe: often multi-vessel dissection and acute heart failure
- This case highlights a high index of suspicion for P-SCAD in any pregnant or postpartum woman with symptoms suggestive of ACS

2. Tweet MS, et al. Spontaneous Coronary Artery Dissection Associated with Pregnancy. JACC.2017.