Spontaneous Coronary Artery Dissection in the Third Trimester

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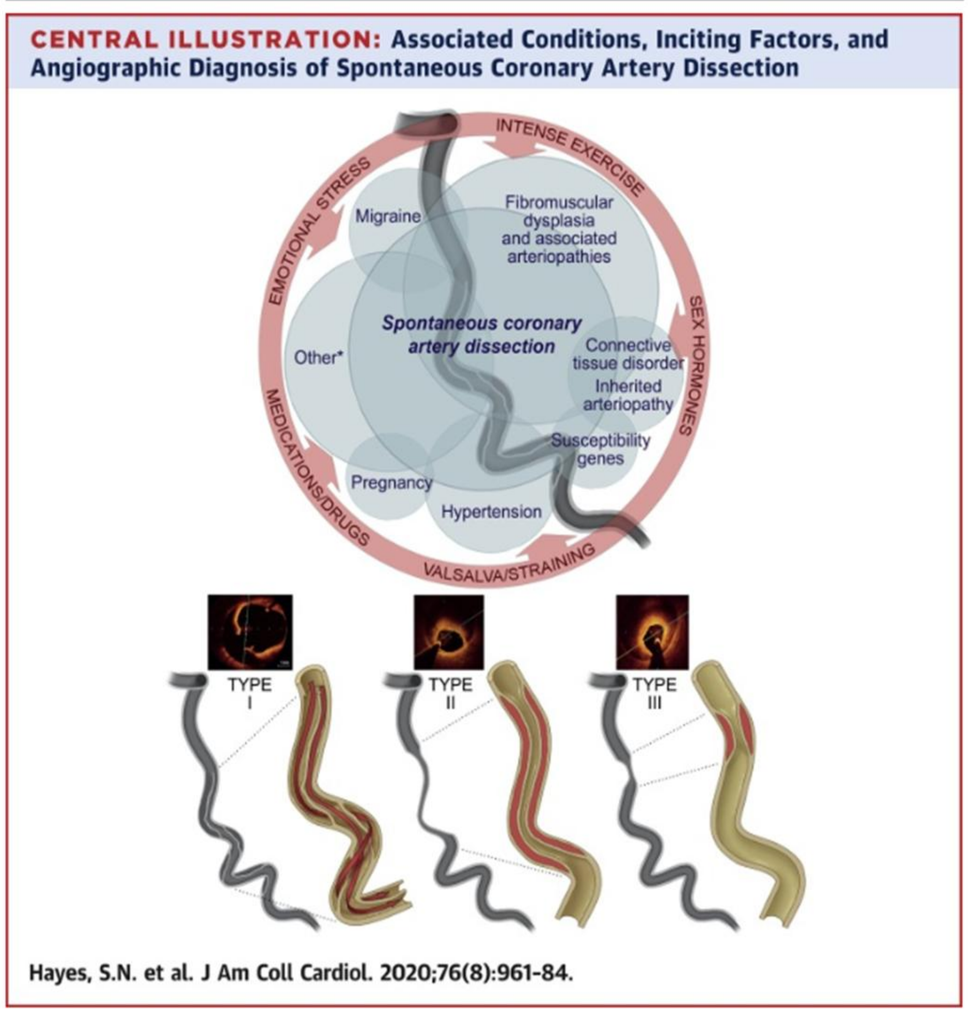
Introduction

- Pregnancy-associated spontaneous coronary artery dissection (P-SCAD) occurs in 1.8 per 100,000 pregnancies
- P-SCAD causes 15-43% of pregnancy-associated MI
- Most cases occur postpartum, though third trimester also common



Case Presentation: SCAD

- 41-year-old G5P1031 at 38w3d presented with mid-sternal chest pain, found to have type 1 NSTEMI
- Left heart catheterization showed focal Type 1 SCAD of OM2
- Aspirin and a cangrelor infusion initiated while awaiting delivery planning

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Case Management: Cesarean Section

- Multidisciplinary team recommended cesarean delivery under GA to avoid myocardial demand associated with labor and to minimize interruption in antiplatelet therapy required for safe neuraxial
- Cangrelor paused 2 hours before surgery
- Pre-induction arterial line placed
- General anesthesia, RSI with propofol and succinylcholine
- Healthy neonate was delivered
- Quantitative blood loss: 1,115 mL
- Blood transfusion: 1unit PRBC intraop
- Postoperative antiplatelet: clopidogrel
- Discharged home: POD 5

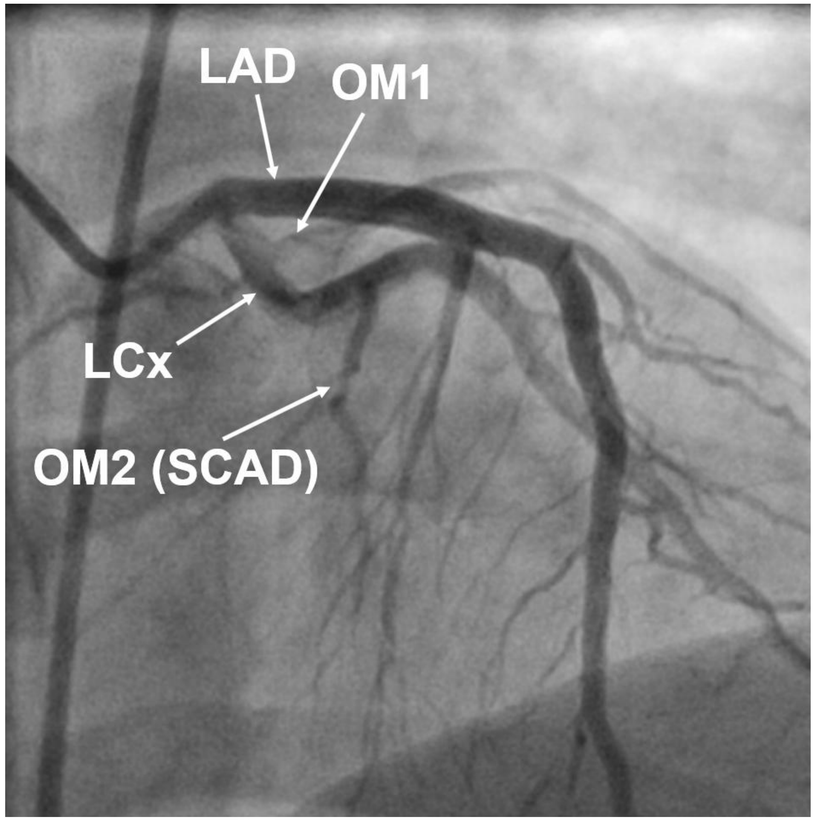

Figure. Selective angiogram of the left main coronary artery demonstrating luminal irregularity of OM2, concerning for Type 1 SCAD. *LAD, left anterior descending; OM, obtuse marginal; LCx, left circumflex; SCAD, spontaneous coronary artery dissection.*

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Discussion

In patients with P-SCAD, vaginal delivery with a passive second stage or cesarean delivery are recommended

Goals - avoid increased myocardial oxygen demand with Valsalva

Coronary angiography is the gold standard for diagnosis

Coronary angiography can be performed with acceptably low levels of fetal radiation exposure

SCAD associated with fibromuscular dysplasia and connective tissue disorders

P-SCAD confers increased risk of recurrent MI in future pregnancies

Those who become pregnant again require early attention from a multidisciplinary team (cardiology, maternal-fetal-medicine, anesthesiology)

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