

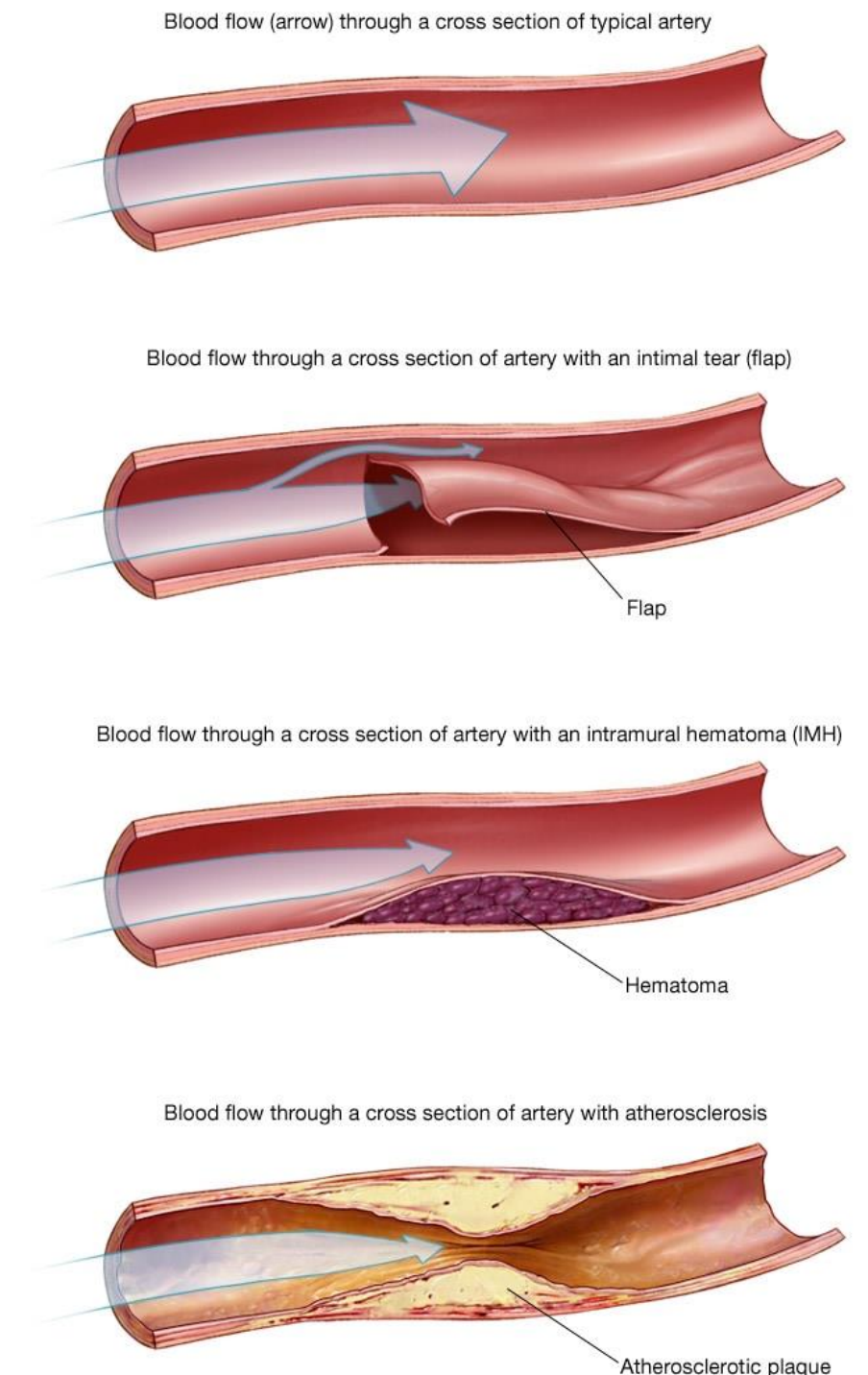
Postpartum Spontaneous Coronary Artery Dissection, A Case Report

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Background

- Spontaneous coronary artery dissection (SCAD) is a rare cardiovascular phenomenon primarily affecting young, otherwise healthy individuals, especially females.
- The condition involves the separation of coronary artery wall layers, leading to the formation of a false lumen.
- SCAD presents with acute myocardial infarction-like symptoms, making diagnosis and management challenging.
- Risk factors include multiparity, connective tissue disorders, vasculitis, drug abuse, and emotional or physical stress.
- Diagnosis is typically made through coronary angiography, with conservative and invasive management options available.



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Case Presentation

- 41-year-old G9 P6026 female with a history of polysubstance use disorder underwent uncomplicated C-section for non-reassuring fetal heart tones and placental abruption.
- Developed acute coronary syndrome POD-3, with ST elevations on EKG.
- Subsequent coronary angiography indicated SCAD involving mid-left anterior descending coronary artery.
- Medically managed with magnesium sulfate infusion for preeclampsia, 81 mg aspirin daily, 25 mg metoprolol tartrate BID, and 30 mg nifedipine XL daily.
- Follow-up echocardiography showed reduced EF of 30-35% and impaired LV relaxation.

| Medication | Recommendation | Breastfeeding |
|----------------|------------------|---------------|
| Antiplatelets | Lack of evidence | ✓ |
| Beta-Blockers | Recommended | ✓ |
| CCBs | No clear benefit | ✓ |
| MRAs | No clear benefit | ✓ |
| ACE Inhibitors | No clear benefit | X |
| ARBs | No clear benefit | X |
| Diuretics | No clear benefit | ✓ |
| Statins | No clear benefit | X |

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Discussion

- SCAD is a rare condition with rising awareness due to routine angiography usage, primarily affecting females without prior history of coronary artery disease.
- Diagnosis relies on coronary angiography, with various management options available, including conservative and invasive approaches.
- The decision between conservative and invasive management should be individualized based on patient characteristics, extent of SCAD, and associated comorbidities, considering the risks and benefits.

Key Points

- SCAD primarily affects young, otherwise healthy females, often in the postpartum period.
- Conservative management may lead to excellent long-term survival, while invasive approaches may carry higher risks – AHA recommends conservative management in stable, low-risk anatomy patients.
- Counseling regarding future pregnancies is essential due to high recurrence risk and maternal mortality associated with SCAD.