An Interesting Case of ACS

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Internal Medicine Residency
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La Crosse, WI
34 Year Old Caucasian Female
2 Months Postpartum
Retrosternal Chest Pain
Radiation Into Left Arm
Pain Between Her Shoulder Blades
Associated N/V, Diaphoresis
History

- No Known Cardiac Risk Factors
- Family History of RBBB
- Meds: Probiotics, Prenatal Vitamins
- Non Smoker
Case Presentation

- Hypertensive
- Exam Was Unremarkable
- EKG: ST elevations in I, II, aVL + RBBB
- Troponin I and CKMB WNL
Hospital Day 3: “Heartburn”

- Troponin Increased
- Repeat Angiogram
- Stent placed to 1st Diagonal – Small Plaque

- Lipoprotein Analysis
  - Total 180, LDL 90, HDL 66, Trig 63
  - $Lp(a)$ 107 mg/dL ($<30$ mg/dL)
Spontaneous Coronary Artery Dissection (SCAD)

- Rare Cause of Acute MI
- **Women > Men**
  - Peripartum
- LAD – 60-80%, RCA - Men
Classification

1. Peripartum
2. Atherosclerotic
3. Idiopathic
4. Other Causes
   - Connective Tissue Disease, SLE, Cocaine, Vigorous Exercise, Coronary Spasms
Presentation

- Sudden Cardiac Death
- Acute Coronary Syndrome
- Asymptomatic → Unstable Angina
- EKG Changes, Increased Cardiac Markers
Pathophysiology

- Intimal Tear
- Rupture of the Vasa Vasorum
Etiology

- Increased Hemodynamic Stress
- Hormonal Effects on Arterial Wall
- Periadventitial Infiltrate of Eosinophils
Coronary Angiography
  • Intimal “Flap”

Intravascular Ultrasound (IVUS)

Optical Coherence Tomography (OCT)
Management

- **Medical**
  - Heparin/LMWH, ASA, Plavix, BB, Nitrates

- **Emergent Angiography → PCI**

- **CABG**

- **Consider Fibrinolytic Therapy**

- **Prognosis is Good**
One Case Report Published

Implicated in Aortic Dissection

Independent Risk Factor for CAD

*Journal of Cardiovascular Medicine* 2011; 12:446-451
Summary

- Rare cause of ACS
- Women – Peripartum
- Angiography
Thank You

- Questions?
References