A CASE OF ACUTE CORONARY SYNDROME IN A 62 YEAR OLD FEMALE WITH A LOW PRETEST PROBABILITY OF CORONARY ARTERY DISEASE

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Background: Patients with low pretest probability for coronary artery disease (CAD) can have various etiologies causing acute coronary syndromes (ACS).

Case: A 62 year old female with no cardiovascular risk factors presented with epigastric pain. Her physical exam was nonrevealing. ECG showed inferior ST depressions. Her troponin was elevated at 0.82.

Decision Making: Given the non-ST elevation myocardial infarction presentation, the patient was started on aspirin, clopidogrel, heparin, and statin. She underwent coronary angiogram which showed tortuous vessels and a severe stenosis in the first obtuse marginal with double lumen appearance, contrast staining, and diminished flow. No areas of plaque were identified. Given the low pretest probability of CAD, a decision was made to perform optical coherence tomography (OCT). OCT (figure) showed intramural hematoma and a dissection flap in the obtuse marginal consistent spontaneous coronary artery dissection (SCAD). The patient was treated with balloon angioplasty alone which improved flow. Stenting was avoided given the vessel tortuosity and the potential for extension of the dissection. She was chest pain free after the procedure and was continued on aspirin and a beta blocker, and her heparin and statin were held given the potential to worsen SCAD.

Conclusion: SCAD should remain in the differential diagnosis for patients with low pretest probability of CAD presenting with ACS. OCT aids in the diagnosis and management of patients with SCAD.