**AN UNCONVENTIONAL CAUSE OF MYOCARDIAL INFARCTION**

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Sudden coronary dissection (SCAD) is an entity not well recognized among physicians. Its presentation occurs predominantly in young middle aged woman with minimal or no risk factors for atherosclerosis. We describe a case of SCAD in a woman who presented with acute coronary syndrome (ACS).

**Case Presentation:** A 58 years old woman presented to the hospital after experiencing sudden onset of typical chest pain. She does not carry chronic medical condition or risk factor for cardiovascular disease. Electrocardiogram on presentation showed ST segment elevation in the inferior leads and depression in the precordial leads. She underwent coronary angiography revealing 90% stenosis of mid circumflex and 100% occluded obtuse marginal coronary artery. Angioplasty and drug eluting stent of affected lesion performed. Thrombectomy did not reveal any thrombus and left ventricular function noted preserved. Despite the findings, bizarrely all major epicardial coronary arteries were free or angiographic evidence of cholesterol plaque. After intervention, angiographic evidence of a dissection plane was identified in the circumflex artery. Intravascular ultrasonography could not confirm the tear. Secondary causes were sought with a computed tomography angiogram (CTA) of neck, abdomen and pelvis. Interestingly CTA showed findings of arterial ectasis involving the distal cervical portion of the left internal carotid artery, questioning chronic dissection flap or intimal fold which was consistent with fibromuscular dysplasia diagnosis. She was discharged on guideline directed medical therapy.

**Discussion:**SCAD is an unusual presentation of myocardial infarction. Awareness has increased during the past few years since first case described in 1931. The pathophysiology is poorly understood but fibromuscular dysplasia is a condition frequently associated with this disease. Promptly diagnosis and management of these patients is essential for positive outcome. Medical therapy vs revascularization is controversial due to the lack of randomized trials. Currently conservative management is prevailing based on observational studies demonstrating spontaneous resolution of these lesions.