**METHYLENEDIOXYMETHAMPHETAMINE (MDMA) INDUCED SPONTANOUS CORONARY ARTERY DISSECTION**

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Spontaneous coronary artery dissection (SCAD) is an uncommon but important cause of sudden cardiac death (SCD) with a predilection for females during pregnancy and post partum period. The syndrome has also been described in the setting of inflammatory, connective tissue disorders and hyperadrenergic states. We report the case of a female who presented with chest pain and ST segment elevations and found to have angiographic evidence of SCAD.

A 27 year-old female with no significant medical history presented with complaints of left chest pain starting 6 hours prior. She reported using 'Molly' the night prior to admission and had no family history of premature coronary artery disease (CAD) or SCD. Workup revealed a normal hemogram and chemistry panel, negative urine pregnancy test and chest radiography was clear of infiltrates with normal mediastinum. EKG showed diffuse ST elevations most prominent in the lateral leads, with normal troponin I and mildy elevated CKMB to 4.7. Subsequent EKGs showed similar pattern but repeat cardiac biomarker 4 hours later showed marked elevation in CKMB and troponin I to 125.7 and 7.65 respectively. She was urgently taken for a left heart catheterization which revealed dissection of the proximal left anterior descending coronary artery with apical akinesis and bare metal stent was successfully deployed.

The mechanism of SCAD leading to acute coronary syndrome and SCD is thought to be from compressive ischemia that results from an intramural hematoma after dissection of the coronary artery. Patient presenting with this syndrome typically lack traditional CAD risk factors and may present with a myriad of symptoms making it difficult to recognize thus a high degree of suspicion and detailed history may help identify the syndrome. Management is still debatable but when suspected, prompt intervention often with percutaneous angiography and stenting is generally employed to prevent potentially fatal consequences.

**Figure 1. Cranial fluoroscopic view showing dissection**



 **Figure 2. Post stent placement in proximal LAD**