

Spontaneous Coronary Artery Dissection

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A 54-year-old female presented with acute onset of typical substernal chest pain and was hemodynamically stable. A coronary angiogram (Figure 1/Videos 1-2, available on cathlabdigest.com) showed spontaneous coronary artery dissection (SCAD) type 2a in first obtuse marginal artery. The patient was managed conservatively with medical management and close monitoring with resolution of symptoms.

SCAD is a split of coronary artery wall in the absence of atheroma. It generally results from either a tear in the intima or bleeding within the media of the vessel.

SCAD type 2 is the most common type of SCAD and is also referred to as an intramural hematoma. It frequently involves the media leading to a long, smooth stenosis without any flap, and may

look similar to plaque erosion or vasospasm. Any coronary manipulation may propagate the dissection. SCAD has a higher complication rate during percutaneous coronary intervention.

The majority of SCADs heal spontaneously as seen on follow-up angiogram after over a month and as such, this justifies conservative management in these patients who do not have active ischemia or total occlusion, and if there is TIMI II or III flow.

While SCAD generally heals spontaneously, acute extension in a few cases may be seen early before eventual healing. Coronary computed tomography may have a role for the evaluation of SCAD healing at 6 weeks. Beta-blocker therapy and the avoidance of triggers can help to reduce any recurrence. ■

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Figure 1. Coronary angiogram showing spontaneous coronary artery dissection (SCAD) in the first obtuse marginal artery.