

**ANGIOGRAPHIC HEALING OF SPONTANEOUS CORONARY ARTERY DISSECTION**

Poster Contributions
Poster Hall, Hall C
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Authors: *Roshan Prakash, Andrew Starovoytov, Eve Aymong, Jacqueline Saw, Vancouver General Hospital, Vancouver, Canada*

Background: Spontaneous coronary artery dissection (SCAD) is an uncommon yet important cause of myocardial infarction in women. Very little is understood about the characteristics of angiographic healing and the time-interval for healing of the affected artery.

Methods: Patients with SCAD who were followed prospectively at the Vancouver General Hospital and enrolled in our local SCAD registries were recruited for this study. Baseline patient demography, angiographic characteristics of the SCAD-affected artery at index and repeat angiograms were qualitatively assessed by 2 experienced angiographers. Criteria for angiographic healing on follow-up angiography were i) residual stenosis <50%, ii) improvement of stenosis severity from index event iii) improvement or normalization of TIMI-flow. Patients without repeat angiography or who underwent PCI during index event were excluded from this study.

Results: A total of 121 patients with 131 non-contiguous lesions were analyzed. Baseline characteristics were as follows: mean age 51.8±7.5 years, 88.4% (107/121) were female, 81.0% (98/121) were Caucasian with FMD present in (76.9%), 93/121 patients. All patients presented with myocardial infarction. At index angiogram, type 2 angiographic SCAD was most common 97/131 (74.1%). The LAD artery was most frequently affected 64/131 (48.9%). TIMI flow <3 was observed in 45/131 (58.8%) of vessels with median lesion stenosis of 90%, (IQR 80-100). Median time to follow-up angiography was 5.1 months (IQR 2.3-16.6). At follow-up angiography, median residual lesion stenosis was 10% (IQR 0-20) and TIMI flow <3 was observed in 5/131 (3.8%) of vessels. Angiographic healing was observed in 116/131 (88.5%) lesions. Of the 15 unhealed segments, all repeat angiograms were performed early (<35 days) after index event (7 for recurrent MI, 4 recurrent symptoms, 2 to confirm diagnosis). Of the 116 healed lesions, all were performed >6 weeks after index event.

Conclusions: The vast majority of coronary arteries affected by SCAD heal spontaneously angiographically, with complete angiographic healing after 6 weeks from the index event.