

Outcomes of Patients Undergoing Primary PCI for Acute Myocardial Infarction due to Saphenous Vein Graft Occlusion

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Background: Primary PCI for Acute Myocardial Infarction (AMI) due to saphenous vein graft (SVG) occlusion have been associated with poor outcomes.

Goal: This study aimed to evaluate the intermediate-term clinical outcomes among our patients (pts) who underwent primary PCI for AMI due to SVG occlusion.

Methods: We used our database of patients treated by primary PCI for STEMI between 1/2001 and 6/2009 excluding pts with cardiogenic shock and late arrival (>12 hours). 21 pts had MI related to SVG occlusion. A control group of 63 pts with native vessel occlusion was selected by 3:1 ratio and adjustment according to the same patient's age and the same area of myocardial infarction.

Results: There were more pts with previous MI in the SV group compared to pts in the control group (67% vs 19%; $p=0.0001$). Only 2% of pts from the control group underwent CABG surgery in the past. No-reflow was documented in 30% of pts vs. only 2% in the matched control group ($p=0.001$). TIMI III flow was achieved in 86% of patients compared to 98% in the control group ($P=0.05$). Six months rates of death were 14% vs. 8% but without statistical significance ($P=0.4$). MACE rates were similar in both groups (29% vs. 24% in control group; $P=0.6$).

Conclusion: The prognosis of primary PCI for AMI in SVG occlusion is similar to that of native lesions despite somewhat more unfavorable procedural outcomes.