

carotid artery intima-media thickness (CCA-IMT) and the ankle-brachial index (ABI) were separately associated with outcome after vascular surgery. Aim of the study was to evaluate if these risk markers have an added predictive value even on top of the RCR index.

Methods: A total of 647 patients with hs-CRP, CCA-IMT and ABI assessment prior to surgery were included. The primary endpoint was a composite of cardiac death and non-fatal myocardial infarction.

Results: Based on multivariate hazard ratios (HRs), a baseline hs-CRP > 6.5 mg/l was not predictive of a 30-day cardiac event, in contrast with a CCA-IMT \geq 1.25 mm and an ABI < 0.91. However, all three risk markers had a significant association with long-term adverse outcome (Table).

Hazard ratios (HR) and odds ratios (OR) for cardiac events after vascular surgery

30-day events	HR	95% CI	p-value	Cumulative X2
Revised cardiac risk index	1.65	1.39-1.95	<0.001	98.9
hs-CRP > 6.5 mg/l	1.10	0.82-1.49	0.521	99.3
CCA-IMT > 1.25	1.44	1.07-1.94	0.016	105.1
ABI < 0.90	2.05	1.53-2.74	<0.001	125.2

Long-term events	OR	95% CI	p-value	Cumulative X2
Revised cardiac risk index	1.69	1.45-1.98	<0.001	152.4
hs-CRP > 6.5 mg/l	1.53	1.17-2.00	0.002	163.8
CCA-IMT > 1.25	2.40	1.84-3.12	<0.001	176.5
ABI < 0.90	2.21	1.69-2.89	<0.001	209.6

Multivariate analysis corrected for gender, age, hypertension, hypercholesterolemia, smoking and chronic obstructive pulmonary disease.

Conclusions: The current results show that combining risk markers with risk factors as embedded in cardiac risk indices can improve perioperative and long-term risk prediction in vascular surgery patients. These additions to risk prediction models should be investigated in other populations.

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PS102.

Mid-Term Results of Atherectomy for Lower Extremity Arterial Occlusive Disease

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Objectives: To determine the viability, safety, and efficacy of various forms of atherectomy devices over a 5 year period in the treatment of lower extremity arterial occlusive disease. In addition, to determine if EPD use confers any benefit with regards to distal embolization during the atherectomy procedure.

Methods: Retrospective review of 150 limbs in 148 patients treated with atherectomy at a single institution over a 5 year period. The atherectomy devices included laser, rotational, and orbital atherectomy. Patient characteristics, type of device used, success of delivery of atherectomy device to target lesion, reconstruction techniques, rate and type of complications, and subsequent procedures were all examined. The use of EPD's in atherectomy procedures were also examined with regard to the rate of distal embolization.

Results: Median age of patients was 64.80% were male. Successful delivery of atherectomy device to target lesion was 93.3% (n=140). The limb level of atherectomy intervention was the superficial femoral artery in 60.7% (n=91). Median length of vessel treated was 12 cm. Majority of reconstruction following atherectomy was balloon angioplasty alone in 63.3% (n=95). Reconstruction success was 86.7%. Vessel rupture or extravasation was seen in 13.3%. 78% of limbs did not require any further intervention. Rate of major amputation after atherectomy was 9.3%. 26.7% of limbs (n=40) received an EPD prior to atherectomy, while 73.3% (n=110) did not. The rate of distal embolization was 12.5% in the EPD group and 15.5% in the non-EPD group (p=0.65, NS).

Conclusions: Atherectomy is a safe, viable, and effective method of intervention for lower extremity arterial occlusive disease. The majority of patients required angioplasty alone as reconstruction after atherectomy. Subsequent rates of further intervention or amputations were low. In the embolic protection substudy, there was no significant difference in the rate of distal embolization between patients treated with or without an EPD.

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Preoperative DNR Status Impacts Perioperative Mortality for Lower Extremity Revascularization and Major Amputation

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