

Factor affecting lower limb amputation following arterial bypass surgery

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Objective: To identify important risk factors for subsequent amputation within one year after surgery in patients with acute lower limb ischemia undergoing distal arterial bypass.

Methods: A chart review of patients undergoing distal vascular bypass for lower limb ischemia within the 5-year period between 2006 and 2011 was done. All patients were followed for at least one year. The outcome of interest was the need for amputation of the treated limb within one year after bypass surgery. Potential risk factors associated with the need to perform amputations were abstracted from the medical charts. Logistic regression and chi-square tests were used to identify significant associations between risk factors and amputation.

Results: Of 128 patients reviewed, only 18 (14%) had amputations within one year. Although there was a trend for increased risk of amputation for patients with a history of smoking, DM, renal dysfunction, presenting with rest pain, lower ABI, multilevel disease, circumferential thickening of the stenosis, and lower risk for patients taking postoperative antiplatelets (but not anticoagulants), the only significant risk factor at the 5% level were poorly controlled diabetes mellitus after operation and cerebrovascular disease.

Conclusion: A few well-known risk factors were associated with increased risk of early amputation after arterial bypass surgery.

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