

The impact of patient characteristics on long-term results of above-knee prosthetic femoropopliteal bypass for critical ischemia.

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Abstract

AIM: The aim of this paper was to study the impact of risk factors on long-term results of above-knee prosthetic femoropopliteal bypass for critical ischemia.

METHODS: One hundred and eleven consecutive operations (108 patients) were done between January 1990 and December 2001. All cases were prospectively registered. The patient characteristics were subjected to univariate analysis using the log rank test for impact on survival, limb salvage and patency rates. Variables approaching significance ($P < 0.1$) were included in multivariate analyses performed with the Cox proportional hazard model.

RESULTS: The 30-day mortality rate was 5.5%. The 2- and 5-year survival was 72% and 42%, respectively. Twenty-seven limbs were subjected to major amputations during follow-up. The limb salvage rates at 2 and 5 years were 83% and 73%. The 2- and 5-year assisted primary patency rates were 45% and 17% versus 52% and 27% for the secondary patency. The 2-year primary patency rate for smokers was 38% versus 62% for non-smokers ($P = 0.018$, hazard ratio 2.18). Smoking and tissue loss were significantly associated with reduced secondary patency rates on multivariate analysis.

CONCLUSIONS: The inferior primary patency rates of smokers indicate that prosthetic femoropopliteal bypass for critical leg ischemia should not be the primary treatment option for these patients. The poor secondary patency rates for smokers as well as for patients with tissue loss suggest that these patients may benefit from alternative treatment modalities, instead of reopening an occluded bypass.