

Perioperative and Rehabilitative Outcomes after Amputation for Ischaemic Leg Gangrene

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Abstract

Introduction: Amputation of the severely ischaemic leg is often done when limb salvage is not possible or the patient is not fit enough for it. It is therefore important to determine the natural history of these amputees as our understanding of this will have significant impact on decision making. The aim of this study was to determine the early and late morbidity and mortality rates and rehabilitative outcome of these patients with lower limb amputation for end-stage arterial occlusive disease. **Materials and Methods:** A retrospective study was done on 72 patients with 77 lower limb amputations for critical limb ischaemia (rest pain, gangrene, ischaemic ulcers) from 1993 to 1998 at the Singapore General Hospital. **Results:** The mean age of the amputees was 69.7 years. Fifty-one per cent of the patients were male. Forty-five (58%) of the amputations were performed because the limb vasculature was not reconstructable, 12 (16%) because the limbs were too late for salvage and the remaining 20 (26%) because vascular reconstruction failed. Below knee amputations account for 63.6% of all amputations, above knee amputations account for 35.1% and through knee amputations account for 1.3%. Fifteen (19%) of the amputations had wound infection and 8% of amputations required re-amputation at a higher level for wound infection or failure of wound healing. The contralateral amputation rate was 21%. The 30-day mortality for all amputations was 11.1% and the commonest cause was acute myocardial infarction which accounted for 37.5%. Vascular reconstruction did not alter the overall or perioperative mortality rate. Cumulative survival figures showed that at the end of four years, only 38% of all amputees were still alive. 52.5% of amputees were wheelchair-bound, only 15% were household ambulators and 27.5% were community ambulators. Of all the patients with unilateral below knee amputations, 40% could walk out of home while only 20% of unilateral above amputations and 12.5% of bilateral below knee amputations could walk out of home. **Conclusion:** Early and late rehabilitation after amputation for critical limb ischaemia remain poor and efforts should be made to salvage critically ischaemic limbs wherever possible in patients who are fit enough.

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Key words: Amputation, Critical limb ischaemia, Gangrene, Rehabilitation

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