

**00456                    Survival Outcomes of Patients With Lower Limb Amputation Following Rehabilitation**

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**Aims:** To assess the survival rates in patients with major lower limb amputation following post-acute rehabilitation.

**Methodology:** Rehabilitation medicine department, a secondary care hospital in Singapore.

**Participants and methods:** This is a retrospective analytic study of consecutive patients who were admitted to rehabilitation services from March 2008 to November 2016 with a minimum follow-up of 1 year.

**Inclusion criteria:** Patients admitted for major dysvascular lower limb amputation, with complete follow-up record available.

**Exclusion criteria:** Traumatic amputations, minor amputations, i.e. ray and toe amputation, and incomplete follow-up records.

**Result:** Seventy-three patients were followed up, of which 45 (65%) were men and 28 (35%) were women, with mean age of 62.7 (21-88) years. These patients were diagnosed with diabetes mellitus (DM), hypertension (HTN), ischaemic heart disease (IHD), or peripheral vascular disease (PWD), and had vascular interventions. At the time of amputation, patients have either normal renal function, chronic kidney disease (CKD), acute kidney disease, or end-stage renal failure (ESRF), of which some were on haemodialysis (HD).

On univariate analysis, the comorbidities significantly associated with mortality were IHD ( $HR=2.34; 1.05, 5.20$ ;  $p=0.037$ ), systolic wall motion abnormality (SWMA) (sys on echo ( $HR=2.12 (1.01, 4.46)$ ;  $p=0.048$ ), and ESRF/HD ( $HR=2.34 (0.96, 5.70)$ ;  $p=0.06$ ). Vascular interventions also affect survival ( $HR=2.33 (1.08, 5.02)$ ;  $p=0.031$ ). IHD, SWMA, and vascular interventions were all significantly related to mortality ( $p<0.05$ ). Haemodialysis was of borderline significance ( $p=0.06$ ). Vascular interventions ( $HR=2.43 (1.13, 5.25)$ ;  $p=0.023$ ) and haemodialysis ( $HR=2.55 (1.04, 6.20)$ ;  $p=0.040$ ) were found to have a significant independent relationship with mortality.

**Conclusion:** From our study, lower limb amputation survival rate at 1 year was 84.93% and at 5 years was 27.39%. Mortality was significantly associated with patients who had vascular interventions and those on haemodialysis.