

Lower limb amputation in Northern Netherlands: incidence and mortalityL. Fortington¹, G. Rommers¹, K. Postema¹, J. van Netten², J. Geertzen¹, P. Dijkstra¹¹Department of Rehabilitation Medicine, University Medical Center Groningen, the Netherlands; ²Department of Surgery, Hospital Group Twente, Almelo, the Netherlands

Background and Aims: Reliable information on the incidence, characteristics and mortality rate of people undergoing lower limb amputation (LLA) is essential for planning preventative, rehabilitation and long-term care services. This information might also help to answer the question 'are we preventing amputation or just delaying it?'. The aims of this study were to determine the incidence of major LLA and the mortality rate after LLA. Incidence is compared to a previous study to look for changes over time. Incidence and mortality are compared between people with and without diabetes. **Research design and methods:** This is a historical cohort study of first-ever, vascular-related, major LLA in 2003-04, in the three Northern provinces of the Netherlands. Medical files were reviewed for population characteristics, details of amputations, comorbidities and date of death (follow-up to 8 years). Incidence rates were estimated for the population with and without diabetes ≥ 45 years. **Results:** Incidence of major LLA was 24 per 100,000 person-years, unchanged since the earlier study. For people with diabetes, the incidence per 100,000 person-years was 171 (men) and 131 (women). The relative risk of LLA was 12 times greater for people with diabetes. Median survival was 21 months (95% CI: 13.9 ; 28.4). 30-day mortality was 22% with no significant differences by age, sex, amputation level or diabetes. 1-year mortality was 44% and 5-year mortality was 77%, again with no significant differences by sub-populations. **Conclusions:** There was no change in the incidence or characteristics of people undergoing major LLA. The decision to amputate, on whom, when and at which level, is difficult especially as the underlying motivations for amputation can be vastly different, for example pain reduction in the end stages of care or regaining a functional limb. These outcomes were represented by our mortality data with a high 30-day mortality but a reasonable long-term rate for this population. People with diabetes in the Northern Netherlands appeared to have a higher rate of LLA than has been reported in other countries; reasons for this high rate need urgent attention.