Delayed Amputation in Lower Limb Trauma: An Analysis of Factors Leading to Delayed Amputation

P Thiagarajan,* MBBS, FRCSG, MCh Orth (Liv)

Abstract

An in-depth analysis of the course of events leading to 49 delayed amputation of the lower extremity in 47 patients with open lower limb fractures is presented. Seventeen amputations were performed within one month mainly for vascular reasons. Eleven were between one month and one year, due to persistent sepsis and 21 amputations were performed more than a year after the original injury for infected non-union.

Below-knee amputation was done in 32 limbs, above-knee amputation in 13 limbs and Symes’ amputation in 4 limbs. The delay in timing of the amputation was analysed with respect to the nature of the injury, the primary treatment and the Mangled Extremity Severity Score (MESS). The MESS score was computed for all injuries and a score of 7 or more predicted an early amputation. We suggest that in all severe lower limb injuries, particularly in Type III C fractures with associated neurological injury, the benefits of an early amputation be considered as an alternative to a limb salvage procedure.

Key words: Amputation, Delay, Mangled extremity, Trauma


* Assistant Professor
Department of Orthopaedic Surgery
National University of Singapore
Address for Reprints: Dr P Thiagarajan, Department of Orthopaedic Surgery, National University Hospital, 5 Lower Kent Ridge Road, Singapore 119074.