

FACTORS ASSOCIATED WITH FUNCTIONAL OUTCOME, LENGTH OF STAY, AND DISCHARGE DESTINATION IN PATIENTS WITH LOWER LIMB LOSS

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Background and Aims

The aim of this study was to explore the associations between baseline patient characteristics (age, BMI, gender, etiology, amputation level, and time from amputation to rehabilitation entry) and three key rehabilitation outcomes in individuals with major lower limb amputation (LLA): functional level at discharge, length of stay (LOS), and discharge destination.

Methods

Medical records of 132 patients admitted to a rehabilitation center between January 2015 and December 2018 were retrospectively reviewed and analyzed.

Results

The median age at amputation was 66.0 years (IQR 57.8–73.0). Median BMI was 23.3 kg/m² (IQR 20.1–27.8), and 73.5% of patients were male. Dysvascular etiologies accounted for 76.7% of LLAs, with 40.2% related to diabetic vascular disease. Non-vascular causes represented 23.3% of cases, including traumatic (12.1%) and other etiologies (11.4%). Unilateral transtibial amputations were most common (49.2%), followed by unilateral transfemoral (41.7%), bilateral transtibial (7.6%), and mixed bilateral amputations (1.5%). The median time between amputation and rehabilitation admission was 17 days (IQR 12–31).

Conclusion

Significant associations were identified between baseline characteristics and rehabilitation outcomes. Younger age was associated with higher functional levels at discharge. Etiology was also significantly related to functional outcomes: patients with traumatic LLAs were more frequently classified into higher functional categories, whereas dysvascular LLAs were more represented in lower functional categories. Regarding discharge destination, younger patients were significantly more likely to return home, and etiology significantly influenced orientation at discharge. As for LOS, older patients and those with dysvascular LLAs, compared with non-vascular LLAs, had significantly longer rehabilitation stays. Finally, a longer interval between amputation and rehabilitation admission was significantly associated with a shorter length of stay. These findings provide insights into optimizing rehabilitation after major LLA, but larger-scale studies are needed to confirm these associations and guide individualized care.

Keywords: Rehabilitation, Amputation, Outcome assessment