

LOWER LIMB AMPUTATIONS IN A NORTHERN PORTUGUESE HEALTH UNIT: A RETROSPECTIVE STUDY

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Background and Aims

Lower limb amputations are complex, last-resort surgeries with significant impact on patient functionality and quality of life. Although exact prevalence data is scarce, it is estimated that around 150,000 amputations are performed annually in the United States. The most common causes are Diabetes Mellitus, Peripheral Arterial Disease, and trauma, though congenital, neoplastic, and infectious pathologies are also reported. This study aims to describe and characterize patients who underwent major (hip disarticulation, transfemoral, transtibial) and minor (distal to tibiotalar level) lower limb amputations at the Santo António Local Health Unit in northern Portugal.

Methods

A retrospective analysis was conducted using clinical records from 2015 to 2024 of patients followed in the Physical and Rehabilitation Medicine Department. Data collected included age, sex, amputation level and side, cause, cardiovascular risk factors, prosthetic use and mortality. Statistical analysis was performed using IBM SPSS Statistics 29.0.2.0.

Results

A total of 744 patients were included (71.8% male), with a mean age of 67.3 years. Transtibial amputation was the most common (39.2%). Other major amputations included transfemoral (35.2%) and hip disarticulation (0.8%) and minor amputations accounted for 7.5%. Vascular causes were most prevalent (50.9%), followed by trauma (15.3%), neoplasia (5.6%), and infection (3.9%). Cardiovascular risk factors were frequent: 53.1% of patients had diabetes, 67.6% hypertension, 66.2% dyslipidemia, 50.4% peripheral arterial disease, and 33.7% were smokers. Prosthetic fitting was achieved in 76.9% of cases. During follow-up, 27.8% of patients died, with a mean age at death of 70.9 years.

Conclusion

Vascular etiology was the leading cause of lower limb amputation in this cohort. The high prosthetic fitting rate may reflect quality rehabilitation services. Further studies are essential to improve care strategies for this patient population.

Keywords: Lower limb; Amputation; Portugal.