

Quality of Life and Functionality of Patients with Heel Reconstruction After Landmine Explosions

Fatih Zor, MD; Levent Tekin, MD; Sinan Ozturk, MD; Selcuk Isik MD;

Abstract

Background: Landmine injuries cause extensive soft and bony tissue loss of the weight bearing areas, particularly the heel. The aim of this study is to determine the quality of life and long term functionality of the patients who had heel reconstruction with free muscle flap following after landmine injuries (1-3).

Methods: Nineteen male patients who had heel reconstruction with free muscle flap were included in the study. Nine male volunteers without any gait disorder were included in the study as the control group. Functional Ambulation Scale (FAS), Energy Expenditure Index (EEI), 6-minute walking test (6MWT), 10-meter walking test (10MWT), Short Form 36 (SF-36) and Visual Analogue Scale (VAS) were used for evaluation (4). In patients with heel reconstruction, we also performed Freiburg ankle evaluation test and Graves radiologic evaluation test.

Results: There were no statistically significant differences between the two groups in terms of FAS, EEI, 6 MWT and 10 MWT. Regarding SF-36 scores, all subgroup values were lower in the reconstruction group whereas only those of general health, vitality and physical-emotional role limitation subgroups showed statistical significance. Mean VAS scores were found to be statistically different between groups ($p<0.05$). Mean Freiburg ankle scores showed moderate functionality.

Conclusions: Although some physical and emotional role limitations, patients with heel reconstruction have adequate and functional ambulation at long term follow up. Considering the fact that our patient group comprised young men, we think that further studies can be conducted in similar subjects at older ages as well.

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