

9

THE INFLUENCE OF PHYSICAL ACTIVITY ON ANKLE JOINT MOBILITY IN PATIENTS WITH VENOUS LEG ULCER

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The aim of the study was to assess the influence of physical activities on ankle joint mobility in patients suffering from venous leg ulcer.

Material and Methods: 48 patients participated in this study. There were 32 patients suffering from venous ulceration and 16 healthy people who constituted a control group. The patients with ulceration were randomized to 2 groups - 16 to the group which consist of broaden physical activity program and bike exercise program. Another 16 patients performed a basic physical activities program. The range of ankle joint mobility was assessed by measurement of foot dorsiflexion and plantar flexion. The 32 cm goniometer was used with a scale from 0°to180° and accuracy to 1°.

Results: Patients suffering from ulcers were characterized by substantially lower mobility of ankle joint both in dorsiflexion ($p<0.01$), and plantar flexion ($p<0.01$).

The ankle joint mobility was negatively correlated with ulceration surface, extent of lipodermatosclerosis and a value of CEAP score. Among the group of patients with ulcers, the increase of ankle joint mobility was observed. The bigger improvement of dorsiflexion and plantar flexion was observed in patients performing expanded physical activities program ($p<0.05$).

Conclusion: Systematic physical activities of foot joints significantly increase the range of ankle joint mobility in patients with venous ulcers. The exercises performed by patients at home are effective, however the bigger advantages are benefited by systematic training on rehabilitation bike.