



The efficacy of heavy load exercise for the treatment of chronic Achilles tendinosis. A randomized controlled trial

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Introduction

The Achilles tendon is the strongest and largest tendon in the body. It is extremely vulnerable to injury due to its limited blood supply and the numerous forces to which it is subjected. The objective of this study is to compare the effectiveness of treatment with eccentric loading with physiotherapeutic interventions (ultrasound and physical therapy) for the treatment of chronic Achilles tendinosis.

Materials and Methods

This is a randomized controlled trial which is performed at the Physical Medicine and Rehabilitation Clinic in University Clinical Center of Kosovo. Twenty-four patients with Achilles tendinosis are included in the trial. The subjects were randomly assigned to either the intervention group (n=13) who were treated with eccentric loading exercise and the control group (n=11) who received ultrasound and physical therapy. Outcomes were assessed at baseline and postintervention. The primary outcome was pain as assessed by Visual Analogue Scale and the secondary outcome was calf muscle strength assessed by dynamometer. All subjects were evaluated before treatment and at the 12th week.



Results

Twenty-four of 33 subject randomized (72.7%) completed the study. There were no significant differences between the two groups with regard to any variable at baseline ($p>0.05$). In the exercise group, significant improvements were demonstrated for VAS, and muscle strength compared to the control group. The exercise group reported a significantly greater increase in all variables at 12 weeks than did the control group ($p<0.01$).



Conclusions

Our results suggest that heavy load eccentric exercise is beneficial in the treatment of Achilles tendinosis. Future studies are needed to evaluate the effectiveness of similar exercise programs over longer periods of time.

References

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