

BACHELOR THESIS ABSTRACT

Author: Veronika Čefelínová

Supervisor: Ing. Marie Plecháčová

Title: Possibilities of affecting pain by using physical therapy in patients with plantar fasciitis

Subtitle: Application of ultrasound and high intensity laser

Abstrakt bakalářské práce:

This bachelor thesis deals with the possibilities of affecting pain by using therapeutic ultrasound and high intensity laser in patients with plantar fasciitis. The thesis has a practical and a theoretical section.

The theoretical section is devoted to pain, which I try to affect via physical therapy, the disease of plantar fasciitis, the principle of therapeutic ultrasound and high power laser and their positive and negative effects, indications, contraindications and their use in the treatment of plantar fasciitis are described.

The practical section involved 8 patients with plantar fasciitis in the acute stage. Pressure algometry and functional tests were used for objective evaluation. For subjective evaluation, a short form of Brief Pain Inventory was used, which focuses on pain experienced in the last 24 hours. The results of each method are presented in the form of tables and graphs.

The results show an improvement in all the monitored parameters in both groups. There was an increase in pain threshold and a decrease in pain intensity on the NRS scale in all questions asked. Nevertheless, according to the results of the probands included in my thesis, we can conclude that high power laser therapy brings better results than ultrasound therapy. However, to confirm this hypothesis, the observation set would have to include a larger group of probands.

Key words: pain, plantar fasciitis, heel spur, therapeutic ultrasound, high intensity laser