

BACHELOR THESIS ABSTRACT

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Title: The importance of high-intensity laser therapy in the treatment of the shoulder impingement syndrome

Abstract:

This bachelor thesis examines the importance of high-intensity laser therapy (HILT) in the treatment of the shoulder impingement syndrome. The objective of this study is to verify the effectiveness of the HILT on clinical results and on alleviating difficulties of the patients with shoulder impingement syndrome. The thesis is theoretical-practical. The theoretical part deals with the anatomy and kinesiology of the shoulder girdle, diagnostics and treatment methods. The final component of the theoretical part is the laser therapy.

Based on the inclusion criteria, a set of 7 patients was selected for the practical part. The HILT was performed on a total of 10 of their shoulder joints. The total amount of therapies was 6, administered 2 times per week for 3 weeks.

The effectiveness of the treatment was evaluated with the clinical examination, which consisted of shoulder range of motion (ROM) measurement, clinical tests, Constant shoulder score, The Disabilities of the Arm, Shoulder and Hand Score (QuickDASH) and pain evaluation. These examinations were held at the baseline, after the end of the treatment and one month after the treatment.

The results confirm that HILT has positive effects on pain reduction, improvement of QuickDASH and Constant shoulder score in patients with shoulder impingement syndrome. HILT also had a positive and neutral effect on increasing the shoulder ROM. The most significant positive effects of HILT were observed immediately after the end of the treatment.

Key words: shoulder impingement syndrome, high-intensity laser, shoulder pain