**Title:** The Use of High Intensity Laser in Physiotherapy

Abstract:

This bachelor thesis is concerned to the use of a high performance laser in the

physiotherapy, especially at patiens with painful or functional disorders of shoulder joint. The

thesis is dividend into the oretical and practical part. The aim of this work is to raise the

awareness of the use of a high performance laser in the physiotherapy and by there a search

compare the results of the therapy with laser and without at selected patients.

The theoretical part is devoted to laser problematic. This part provils informations

about basic laser principals and effects, indication and contraindication, but also presents

different types of lasers and their use. The second part deals with shoulder joint, its anatomy,

kinesiology and phatology.

The practical part is based on research of the effects of high performance laser therapy

at patiens with painful or functional disorders of the shoulder. The effect of therapy is judged

in terms of pain and active range of movements. Patients are divided in two groups (target and

control group). The results of research provide the informations on the positive effect of the

therapy by using a high performance laser at monitored patients.

The discussion of the work focuses on the evaluation of the effect of the therapy and

factors that could influence this result. It also compares result of research with foreign studies.

In conclusion is sum up the benefit of the work and also the achievement of goals.

**Key words**: laser, high intensity laser, HILT, shoulder joint