



## **Low Level Laser Therapy & Elbow clinical research**

### **Laser is effective for medial and lateral epicondylitis**

Simunovic Z, Trobonjaca T et al.

Treatment of medial and lateral epicondylitis - tennis and golfer's elbow - with low level laser therapy: a multicenter double blind, placebo controlled clinical study of 324 patients. *J Clinical Laser Med & Surg.* 1998; 16 (3): 145-151.

In a two center study 324 patients with unilateral medial or lateral epicondylitis were treated with LLLT. Trigger points were treated with 830 nm. 633 and 904 nm in combination was used in the scanning mode. Total pain relief was obtained in 82% of the acute cases and 66% in the chronic cases. A combination of trigger points (TP) and scanning was more effective than TP alone and TP alone were more effective than scanning alone. One of the centers had slightly less powerful lasers and the outcome was a bit lower, although the dosage was the same in both centers.

### **LLLT is as well documented as NSAIDs and steroid injections for shoulder tendinitis/bursitis and epicondylalgia.**

The Norwegian physiotherapist Jan M Bjordal published his thesis "Low level laser therapy in shoulder tendinitis/bursitis, epicondylalgia and ankle sprain" in 1997, at the Division of Physiotherapy Science, University of Bergen. It has also been published in *Physical Therapy Reviews.* 1998; 3: 121-132.

### **Low level laser versus placebo in the treatment of tennis elbow.**

**Vasseljen O Jr, Hoeg N, Kjeldstad B, Johnsson A, Larsen S.**

Trondheim Fysikalske Institutt, Norway.

The effect of low level laser (GaAs) on lateral epicondylitis was investigated in a doubleblind, randomized, controlled study. Thirty patients were assigned equally to a laser (n =15) or a placebo laser (n = 15) group. All patients received eight treatments and were evaluated subjectively and objectively before, at the end of, and four weeks after treatment. Patients also completed a follow-up questionnaire on an average of five to six months after treatment. A significant improvement in the laser compared to the placebo group was found on visual analog scale (p = 0.02) and grip strength (p = 0.03) tests four weeks after treatment. In this study low level laser therapy was shown to have an effect over placebo; however, as a sole treatment for lateral epicondylitis it is of limited value. Further studies are needed to evaluate the reliability of our findings and to compare laser to other established treatment methods.

*J Hand Ther.* 2004 Apr-Jun;17(2):243-66.

Qlaser Wellness Solutions  
Michael F. Lagana, President  
708 Route 35 N., Neptune, NJ 07753  
732 866-4226  
Michael@Qlaserws.com