

The effect of 300mW, 830 nm laser on chronic neck pain: a prospective, double-blind, randomised, placebo-controlled study.

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Abstract: This study was undertaken to test the efficacy of 300mW, 830nm laser in a prospective double-blind, randomised, placebo-controlled trial in patients with chronic neck pain. **Methods:** We conducted a prospective, randomised, doubleblind, placebo-controlled study of low-level laser therapy in 90 patients with chronic neck pain. Laser was applied using the contact method over tender areas in the neck musculature, twice a week for 7 weeks. The primary outcome measure was change in a 10cm Visual Analogue Scale [VAS] for pain. Other measures used included a Self-Reported Improvement in pain [SRI], measured by a VAS, Short-Form 36 Quality-of-Life questionnaire [SF-36], Northwick Park Neck Pain Questionnaire [NPNQ], Neck Pain and Disability Scale (NPAD) and the McGill Pain Questionnaire. Measurements were taken at baseline, at the end of 7 weeks treatment and at 12 weeks from baseline. **Results:** Using intention-to-treat analysis, we found a positive, pain-relieving effect in the treated group, compared with those given placebo, from base line to 12 weeks, using the VAS [p0.065] and other MPQS and MPQA scores (p = 0.3, p = 0.5) did not differ significantly between the two groups. Patients in the treated group experienced a mean self reported improvement of 48.5% compared with 3.99% in the placebo group. **Conclusion:** This study provides strong evidence for the use of 830nm, 300mW Low-Level Laser Therapy in patients with chronic neck pain.