

ABSTRACT

A randomized, controlled study of Low Energy Photon Therapy (LEPT) for whiplash injury

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PURPOSE: The purpose of this study was to test the efficacy of Low Level Energy Photon Therapy for extensor neck muscle recovery and a consequent improvement of nighttime sleep in comparison with results achieved through chiropractic manipulation and exercise. Based on evidence of over 10,000 scientific papers published around the world, it is commonly understood that most, if not all, traumas arising from motor vehicle accidents ("MVA") have a whiplash component.

RESULTS: The randomized, controlled study involved 54 subjects (29 females and 25 males, ranging in age from 23-64 years), each of whom had suffered whiplash injury after a motor vehicle accident. The subjects were randomly allocated to three treatment groups, Group I - 17 – chiropractic manipulation therapy ("CMT"), Group II - 18 – CMT + Exercise ("Ex"), and Group III - 19 – CMT + Ex and LEPT.

The statistical analysis of results indicated that Group III subjects achieved a greater improvement in neck extension muscle strength, at a much more rapid rate compared to both Groups I & II (p.01). This indicates that LEPT assisted in reducing recovery time.

In whiplash injury, a patient can lose 20% of muscle strength in the neck extensor muscle. Neck extensor muscle strength improved by 9% after CMT only (not significant) and by 15% after a program of CMT + Ex. However, with the addition of LEPT, the extensor muscle strength was statistically significant at 24%. Furthermore, a statistically significant difference in the rate of recovery was noted between the groups. The LEPT group demonstrated recovery (to the higher level) after only 4 weeks of therapy, compared to 8 weeks for the CMT + Ex Group.

Additionally, LEPT also helped to extend the patient's uninterrupted sleep after injury in comparison with the two other Groups.