



Effect of Low-Intensity Laser on the Neuropathic Common Peroneal Nerve Post Burn.

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Abstract : Purpose: to determine the effect of low intensity laser therapy (LILT) on the neuropathic common peroneal nerve postburn. **Methods of evaluation:** Measurement of the motor conduction velocity(MCV) of the common peroneal nerve in meter/ second. **Methods:-** Thirty patients (20 males and 10 females) ranging in age from 20 to 35 years, they were selected from the out-clinics of Kasr-El-Aini (Cairo University hospitals) and Om-Al-Misrieen hospital (Ministry of Health), patients were not familiar with the technique LILT and suffering from burns of chronic phase (post-hospitalization period), affecting lower limbs, with the percentage of total body surface area (TBSA) ranging from 20% to 30% and their early diagnosis was a burn of 2nd or 3rd degree and complicated with peripheral mononeuropathy affecting the common peroneal nerve. They were randomly divided into 2 equal groups in number, one study group (A) and a control one (B). the study group formed of 15 patients to which the LILT was applied (20 minutes in each session 3 times per week for 2 months as a total period of treatment), while the control group was formed of 15 patients to which the placebo LILT was applied. Measurements were conducted before starting the treatment as a first record and at the end of the second month of treatment as a second (final) record. **Results and conclusion:-** Results showed that application of the LILT had a valuable improving effects on the neuropathic common peroneal postburn as evidenced by the highly significant increases in the common peroneal nerve motor conduction velocity in meter/ second.

Key words : (Low intensity laser therapy, Neuropathic common peroneal nerve postburn and Motor conduction velocity).