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"Low reactive-level 830 nm GaAlAs diode laser therapy successfully accelerates regeneration of peripheral nerves in human"

Forty patients with short and long-term neurosensory impairment following perioral nerve injuries are presented in this study. Assessment of their sensory level was undertaken using a variety of nerve tests, one of them was a visual analog scale for registration of sensitivity level prior to and after 10 treatment sessions and additionally for 21 of the 40 patients after 20 treatment sessions. Low level laser therapy was applied using GaAlAs 830 nm, 70 mW continuous wave. Dose of 6.0 J/cm² was standardized for all patients. Improvement of the eight patients with clinical symptoms of less than 1 year after 10 treatments, was between 40-90% and after 20 treatments between 60-80% for the three patients who continued with the treatment. In 32 of the 40 patients with clinical symptoms of more than 1 year in duration, their improvement was estimated at between 40 and 80%, 21 patients completed 20 treatment sessions and the end results were between 60-90%. This was an uncontrolled clinical study of LLLT on perioral nerve injuries and demonstrated the effectiveness of GaAlAs laser on the nerve involved when applied to the nerve trunk and terminal endings. Although controlled research into actual mechanisms and pathways is needed, the preliminary findings are very promising.