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**Laser and vacuum therapy for treatment of facial nerve palsies**

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Hide Abstract –

Facial nerve (FN) palsies consist of paralysis of unknown origin potentially caused by metabolic disorders, trauma, and infectious diseases. Currently, FN injuries diagnosed as Bell's Palsy (BP) are characterized by total involvement of the affected hemiface. Our study employed low-level laser therapy (LLLT) for recovery by BP and trauma-based FN palsies. Our LLLT protocol used a GaAlAs laser (780nm) for BP treatment and lasers emitting at 660 and 808nm used synergistically with vacuum therapy equipment for trauma-based FN-palsy treatment. No medication was administered during vacuum therapy and laser treatment. Normal facial expression was achieved including facial symmetry at rest and enhanced facial movement. Our results indicated that LLLT can enable nerve regeneration, as facial muscles recovered their normal functions.