

Effect of Low Level Laser of 830 nm on traumatic nervous lesions

□ALLISON GUSTAVO BRAZ; MARCOS TADEU TAVARES PACHECO; EVANDRO EMANOL SAURO; FLAVIO PILOTO CIRILLO; ANA CLAUDIA DE SOUZA COSTA; MARCOS ANTONIO PEREIRA BRITO

Tissue healing is a complex process that involves local and systemic responses. The process of wound healing involves several types of cells; enzymes; growth factors and other substances. The use of Low Level Laser Therapy (LLLT) for wound healing has been shown to be effective in modulation both local and systemic response. In soft tissues it has been shown that, depending on the wavelength, dose, and local condition, Low Level Laser Therapy has anti-inflammatory effect, reduces pain; quickens cell proliferation and consequently promotes the healing process. The effects of Low Level Laser Therapy on neuronal repair are still controversial as previous reports reveal conflicting results. It is possible that Low Level Laser Therapy effect on neuronal repair reparation depends not only on the total dose of irradiation, but also on the irradiation time and the irradiation mode (Continuous or Pulsed). Most importantly, a recent study has suggested that the threshold energy density and intensity are biologically independent from each other. Traumatic nervous lesions are late clinical evolution pathologies and may present after-effects from a neuronal repair. The aim of this study was to verify the dose responses proposed to the treatment for a partial traumatic nervous lesion, by using a 830nm laser radiation, triplet area and its main adjacent branches of the attacked face, on the nervous course, by punctual contact. The utilized fluency was one of 120 J/ cm² and irradiating of 120 mW and a 830nm- of wavelength. After the patients evaluation, we realized that the low power laser presented significant results on the treated area, proving a favorable response to the treatment and the dose proposed. Key words: laserulcer- reparation.