Phototherapy Promotes Regeneration and Functional Recovery of Injured Peripheral Nerve

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Abstract: Numerous attempts have been made to enhance and/or accelerate the recovery of injured peripheral nerves. One of the methods studied is the use of phototherapy (low power laser or light irradiation) to enhance recovery of the injured peripheral nerve. A critical analysis of the literature on the employment of phototherapy for the enhancement of the regeneration process of the rat facial and sciatic nerve (after crush injury or transection followed by surgical reconstruction) is provided, together with the description of some of the most suitable basic biological mechanisms through which laser radiation exerts its action on peripheral nerve regeneration.

Key Words: Low Power Laser or Light Irradiation; Phototherapy; Nerve Regeneration; Peripheral Nerve Injury