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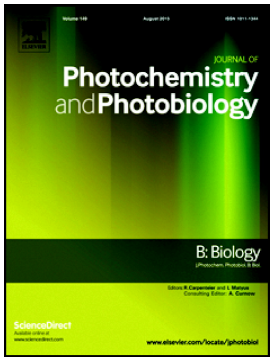

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Paper 2

GaAs laser therapy reestablishes the morphology of the NMJ and nAChRs after injury due to bupivacaine

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Keywords: Bupivacaine ; Low-Level Light Therapy ; neuromuscular junction ; Nicotinic acetylcholine Receptor

Highlights: LLLT reduces alterations in NMJ and in nAChRs triggered by bupivacaine.

Competing Interests

The authors declare no competing interests.

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Abstract

Background: Local anesthetics are used to relieve pre- and postoperative pain, acting on both sodium channels and nicotinic acetylcholine receptors (nAChR) at the neuromuscular junction (NMJ). Bupivacaine acts as a non-competitive antagonist and has limitations, such as myotoxicity, neurotoxicity, and inflammation. Low-level laser therapy (LLLT) has anti-inflammatory, regenerative, and analgesic effects.The aim of the present study was to

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