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Photobiomodulation in Oral Medicine

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Abstract

Objective: To provide a review of the literature about the photobiomodulation therapy (PBMT) dental treatment protocols in oral medicine based on validated clinical studies that have been published so far. ***Background data:*** The lack of effective therapies for the treatment of various types of oral diseases or the presence of invasive therapeutic methods along with the use of a wide range of medications has had a significant impact on the quality of life of these patients. PBMT as a noninvasive and nondrug method can play an influential role in the treatment of oral diseases. ***Methods:*** In this study, published clinical studies up to April 2019 were reviewed from library sources, Google Scholar, PubMed and Medline, Elsevier, Embase, Cochrane, Scopus, and Web of science (ISI). ***Results:*** In general, the findings of this study showed that PBMT has had a positive effect on the treatment of oral lichen planus, recurrent aphthous stomatitis, hyposalivation, pemphigus vulgaris, recurrent herpes simplex, burning mouth syndrome, bisphosphonate-related osteonecrosis of the jaw, trigeminal neuralgia, facial nerve paralysis, geographic tongue, and chronic sinusitis. ***Conclusions:*** PBMT can be effective (as an alternative treatment or in combination with other therapies) in improving symptoms or in the complete treatment of oral diseases. However, further clinical studies are still necessary to achieve more robust results.

Keywords: low-level laser therapy; oral medicine; photobiomodulation.

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