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Synergistic treatment with simultaneous use of vacuum therapy and photobiomodulation therapy (PBMT) on temporomandibular disorders (TMD)

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Abstract

Background. Temporomandibular disorder (TMD) is a term used in functional disorders related to the temporomandibular joint (TMJ). This dysfunction refers to a set of disorders characterized by joint noises, limitations in range of motion or deviations in mandibular function. The etiology of TMD is multifactorial.

Objectives. The purpose of this study was to analyze the oral health-related quality of life (OHIP-14) of a patient with TMD who was treated simultaneously with vacuum therapy and photobiomodulation therapy (PBMT).

Materials and methods. The patient diagnosed with TMD according to the DC/TMD was treated with equipment consisting of negative pressure and PBMT in the same system. The oral health-related quality of life (OHRQoL) was evaluated by the Oral Health Impact Profile (OHIP-14) in 3 moments: pre-treatment (T0), after 8 treatment sessions (T1) and 30 days after the end of treatment (T2).

Results. Patients screened according to the DC/TMD with TMD were treated simultaneously with vacuum therapy and PBMT, and an improvement in pain, mouth opening and quality of life was observed.

Conclusions. Combined therapies (PBMT and vacuum therapies) may be a complementary or alternative treatment to control pain and decrease the recovery time of normality masticatory muscles. The beneficial effects persisted and improved the quality of life of this patient.

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