Format: Abstract

Pain Res Manag. 2018 May 10;2018:4230583. doi: 10.1155/2018/4230583. eCol

Low-Level Laser Therapy for Temporomandibular Disorders: A Systematic Review with Meta-Analysis.

Xu GZ[1,2], Jia J[3], Jin L[2], Li JH[1], Wang ZY[1], Cao DY[1].

Author information

1 Key Laboratory of Shaanxi Province for Craniofacial Precision Medicine Research, Research Center of Stomatology, College of Stomatology, Xi'an Jiaotong University, Xi'an, Shaanxi, China.

2 Department of Neurosurgery, First Affiliated Hospital of Xi'an Medical University, Xi'an, Shaanxi, China.

3 Department of Psychiatry, Xi'an Mental Health Center, Xi'an, Shaanxi, China.

Abstract

OBJECTIVES: We systematically reviewed randomized controlled trials (RCTs) of the effect of low-level **laser therapy** (LLLT) versus placebo in patients with **temporomandibular** disorder (TMD).

METHODS: A systematic search of multiple online sources electronic databases was undertaken. The methodological quality of each included study was assessed using the modified Jadad scale, and the quality of evidence was evaluated using the Grading of Recommendations, Assessment, Development and Evaluation (GRADE) system.

RESULTS: A total of 31 RCTs were included. Total modified Jadad scale scores showed that the methodological quality was high in 30 studies and low in 1 study. Combining data from all clinically heterogeneous studies revealed positive effects of LLLT on pain relief, regardless of the visual analogue scale (VAS) score or the change of VAS score between the baseline and the final follow-up time point, while dosage analyses showed discrepant results about the effects of high or low doses for patients with TMD. Follow-up analyses showed that LLLT significantly reduced pain at the short-term follow-up. **Temporomandibular joint** function outcomes indicated that the overall effect favored LLLT over placebo.

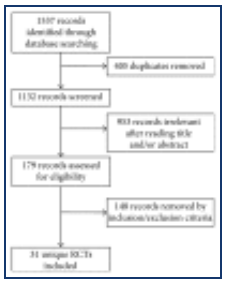
CONCLUSION: This systematic review suggests that LLLT effectively relieves pain and improves functional outcomes in patients with TMD.

PMID: 29861802 PMCID: PMC5971344 DOI: 10.1155/2018/4230583

[Indexed for MEDLINE] **Free PMC Article**

Images from this publication. See all images

(1) Free text



Publication types, MeSH terms

LinkOut - more resources