

Randomized Controlled Trial > Br J Oral Maxillofac Surg. 2022 Apr;60(3):350-356.

doi: 10.1016/j.bjoms.2021.08.001. Epub 2021 Aug 26.

Evaluation of the efficiency of different treatment modalities in individuals with painful temporomandibular joint disc displacement with reduction: a randomised controlled clinical trial

Ömer Ekici¹, Ümit Dündar², Gonca Deste Gökay³, Murat Büyükbosna²

Affiliations + expand

PMID: 34756640 DOI: 10.1016/j.bjoms.2021.08.001

Abstract

The aim of the study was to investigate and compare short and long-term effects of occlusal splints (OS), ultrasound (US), and high-intensity laser therapy (HILT) in patients with painful temporomandibular joint (TMJ) disc displacement with reduction (DDWR). This prospective, randomised, single-blinded, controlled clinical study was conducted on patients with DDWR at a university oral and maxillofacial surgery clinic. A total of 140 patients were allocated randomly to four groups (OS, US, HILT, and control), with 35 patients in each. Patients were evaluated for pain, range of motion of the jaw, disability, and quality of life. A total of 132 patients completed the study. In all treatment groups (OS, US, and HILT), a significant improvement was observed in terms of pain, function, disability, and quality of life, at both weeks four and 12 compared with the control group ($p < 0.001$). Improvements in VAS pain and maximum mouth opening were not significantly different between the treatment groups. However, compared with the OS group, there was a significant improvement in the HILT and US groups in terms of total Oral Health Impact Profile (OHIP-14) and Jaw Functional Limitation Scale-20 (JFLS-20) scores at week four, but no difference between the groups at week 12. The results of this study show that OS, US, and HILT are effective treatments for pain and functional jaw movements in patients with DDWR. HILT, a new method, can be an alternative treatment in cases of TMD.

Keywords: High-intensity laser therapy; Occlusal splint; Temporomandibular disorder; Ultrasound therapy.

Copyright © 2021 The British Association of Oral and Maxillofacial Surgeons. Published by Elsevier Ltd. All rights reserved.

FULL TEXT LINKS



ACTIONS

“ Cite

☆ Favorites

SHARE



PAGE NAVIGATION

< Title & authors

Abstract

Similar articles

Publication types

MeSH terms

Related information

LinkOut - more resources