

PubMed

Abstract

[Full text links](#)

J Oral Maxillofac Surg. 2015 Sep;73(9):1706-13. doi: 10.1016/j.joms.2015.03.045. Epub 2015 Mar 24.

Platelet-Rich Plasma Injection as an Effective Treatment for Temporomandibular Joint Osteoarthritis.

Hegab AF¹, Ali HE², Elmasry M³, Khallaf MG⁴.

Author information

Abstract

PURPOSE: Emerging evidence has suggested that platelet-rich plasma (PRP) might be of assistance in the treatment of degenerative conditions of the joints. The aim of the present study was to compare the use of PRP and hyaluronic acid (HA) in the treatment of temporomandibular joint (TMJ) osteoarthritis (OA) with long-term follow-up data.

PATIENTS AND METHODS: Patients meeting the Research Diagnostic Criteria for TMJ-OA were randomly assigned to 1 of 2 study groups that received either PRP or HA. The outcome variables were maximum nonassisted (voluntary) mouth opening (MVMO), joint sounds, and pain index scores. Other variables, including patient age and gender, were evaluated in relation to the outcomes. Descriptive and bivariate statistics were computed, and the P value was set at .05.

RESULTS: A total of 50 patients with TMJ-OA were enrolled in the study (29 women and 21 men, age range 31 to 49 years, mean age 38.6). In group I, 25 patients received 3 injections of 1 mL of PRP. In group II, 25 patients received 3 injections of 1 mL of low-molecular-weight HA. Between-group comparisons of the outcome variables over time revealed significant improvements in group II at 1 and 3 months. At 6 and 12 months, the PRP group exhibited better performance compared with the HA group in terms of the recurrence of pain and joint sounds. The improvements obtained with the PRP injections in group I were maintained during the follow-up period. At the end of the follow-up period, the median MVMO in group I was 41.0 mm. In group II, the median MVMO was 39.0 mm.

CONCLUSION: PRP performed better than HA acid in the treatment of TMJ-OA during long-term follow-up in terms of pain reduction and increased interincisal distance. Future studies will focus on the synergistic actions of HA and PRP in the treatment of TMJ-OA.

Copyright © 2015 American Association of Oral and Maxillofacial Surgeons. Published by Elsevier Inc. All rights reserved.

PMID: 25882438 [PubMed - in process]

LinkOut - more resources



PubMed Commons

[PubMed Commons home](#)

0 comments

[How to join PubMed Commons](#)