

PubMed



Format: Abstract

Full text links

*Foot Ankle Int.* 2015 Aug;36(8):891-900. doi: 10.1177/1071100715578435. Epub 2015 Mar 30.

Clinical Effects of Platelet-Rich Plasma and Hyaluronic Acid as an Additional Therapy for Talar Osteochondral Lesions Treated with Microfracture Surgery: A Prospective Randomized Clinical Trial.

Görmeli G¹, Karakaplan M², Görmeli CA³, Sarıkaya B⁴, Elmalı N⁵, Ersoy Y⁶.

Author information

Abstract

BACKGROUND: Osteochondral ankle injuries commonly affect the dome of the talus, and these injuries are a common cause of athletic disability. Various treatment options are available for these injuries including intra-articular hyaluronic acid (HA) and platelet-rich plasma (PRP) injections. The purpose of this study was to compare the effects of HA and PRP as adjunct therapies after arthroscopic microfracture in osteochondral lesions (OCLs) of the talus.

METHODS: In this prospective, randomized blinded study, 40 patients with **talar** OCLs in their ankle joints were treated with arthroscopic debridement and a microfracture technique. Thirteen randomly selected patients received PRP, 14 patients received HA, and the remaining 13 patients received saline as a control group. The participants were assessed using the American Orthopaedic Foot & Ankle Society (AOFAS) and visual analog pain scale (VAS) scores after a 15.3-month (range, 11-25 months) follow-up.

RESULTS: Postoperatively, all the groups exhibited significantly increased AOFAS scores and decreased VAS scores compared with their preoperative results ($P < .005$). The AOFAS scores were significantly increased in the PRP group versus the HA and control groups ($P < .005$), although the increased AOFAS scores in the HA group versus the control group were also significant ($P < .005$). Similar to the AOFAS scores, the decrease in the VAS scores was significantly lower in the PRP group versus the HA and control groups ($P < .005$). In addition, the HA group had significantly lower VAS scores than the control group ($P < .005$).

CONCLUSION: Both PRP and HA injections improved the clinical outcomes of patients who underwent operation for **talar** OCLs in the midterm period and can be used as adjunct therapies for these patients. Because a single dose of PRP provided better results, we recommend PRP as the primary adjunct treatment option in the **talar** OCL postoperative period.

LEVEL OF EVIDENCE: Level I, prospective randomized study.

© The Author(s) 2015.

KEYWORDS: hyaluronic acid; microfracture; osteochondral lesions; platelet-rich plasma; talus

[Indexed for MEDLINE]

Publication type, MeSH terms, Substances



Publication type

Randomized Controlled Trial

MeSH terms

Adult

Arthroplasty, Subchondral*

Arthroscopy

Cartilage, Articular/injuries

Cartilage, Articular/surgery*

Debridement

Female

Humans

Hyaluronic Acid/therapeutic use*

Male

Patient Satisfaction

Platelet-Rich Plasma*

Prospective Studies

Single-Blind Method

Talus/injuries

Talus/surgery*

Viscosupplements/therapeutic use*

Visual Analog Scale

Substances

Viscosupplements

Hyaluronic Acid

LinkOut - more resources

