Check for updates

Functional Outcomes After Arthroscopic Cell-Free Osteochondral Scaffold Surgery

Selda Başar[1], Zeynep Hazar[1], Mehmet Gem[2], Ulunay Kanatlı[3]

[1] Gazi University Faculty of Health Sciences, Department of Physiotherapy and Rehabilitation, Ankara, TURKEY, [2] Dicle University Faculty of Medicine, Department of Orthopedics and Traumatology, Diyarbakır, TURKEY, [3] Gazi University Faculty of Medicine, Department of Orthopedics and Traumatology, Ankara, TURKEY

Objectives: Treatment of osteochondral lesions of the talus is still controversial. Arthroscopic cell-free osteochondral scaffold technique used in knee surgery although experience with the use in the treatment of ankle is not enough. The purpose of this study was to investigate the functional outcomes after arthroscopic cell-free osteochondral scaffold technique in talus osteochondral lesion at the end of 1.year.
Methods: Total of 15 patients (7 women, 8 men) undergone arthroscopic cell-free osteokondral scaffold surgery due to osteochondral lesion of the talus were included in this study (mean age; 41.6±15.7 years; range 17-67). At the end of the first year range of motion, muscle strength, ankle function and quality of life were assessed. Ankle range of motions were evaluated with universal goniometer and ankle muscle strength were measured with digital dynamometer (Baseline ®). Ankle functions were determined with the American Orthopedic Foot-Ankle society score (AOFAS). Quality of life was assessed with the Nottingham Health Profile.
Results: There was no statistical difference between the operated side and the other side in the ankle joint range of motion (p>0.05). Ankle muscle strength was not different between the operated side and the other side except ankle dorsiflexion muscle strength (p>0.05). The American Orthopedic Foot-Ankle society score (AOFAS) revealed a significant improvement from 54±6.4 2 to 81±9.8 at the 12 months' evaluation. Total score of Nottingham Health Profile improved from 47.6 ± 20.3 to 29.9 ± 26.7.
Conclusion: Arthroscopic cell-free osteokondral scaffold procedure appears to be a effective treatment with increasing the functional and quality of life, particularly in localized disease of the ankle joint such as talus osteochondral lesion.

The Orthopaedic Journal of Sports Medicine, 2(11)(suppl 3)
DOI: 10.1177/2325967114S00160
©The Author(s) 2014

This open-access article is published and distributed under the Creative Commons Attribution - NonCommercial - No Derivatives License (http://creativecommons.org/licenses/by-nc-nd/3.0/), which permits the noncommercial use, distribution, and reproduction of the article in any medium, provided the original author and source are credited. You may not alter, transform, or build upon this article without the permission of the Author(s). For reprints and permission queries, please visit SAGE's Web site at http://www.sagepub.com/journalsPermissions.nav.