

Original Paper

Effect of prefabricated and custom- made splints on quality of life in the first carpometacarpal joint osteoarthritis

Ahmadi Bani M (MSc)¹, Arazpour M (MSc)*¹
Vahab Kashani R (MSc)², Mousavi Khtat M (MSc)³

¹PhD Candidate in Orthotics and Prosthetics, Member of Student's Research Committee, University of Social Welfare and Rehabilitation Science, Terhan, Iran. ²MSc in Orthotics and Prosthetics, University of Social Welfare and Rehabilitation Science, Terhan, Iran. ³MSc in Rehabilitation Management, University of Social Welfare and Rehabilitation Science, Terhan, Iran.

Abstract

Background and Objective: The first carpometacarpal joint osteoarthritis reduced the ability of upper limb in elderly with subsequent disability in physical activities. This study was carried out to determine the effect of prefabricated and custom-made splints on quality of life in the first carpometacarpal joint osteoarthritis.

Materials and Methods: This quasi-experimental study was done on 24 elderly (>60 years of age) patients with the first carpometacarpal joint osteoarthritis and 12 matched healthy subjects in Tehran rehabilitation University during 2010-11. Patients assigned randomly in two groups with 8 weeks treatment period, prefabricated thumb and custom-made splints. Persian version of The Short Form 36 questioner (SF36) was used to assess the quality of life. Data were analyzed using SPSS-16 and paired t-test.

Results: There were significant differences between osteoarthritis patients and healthy subjects in the quality of life according to SF36 score physical health problem ($P<0.05$), general health ($P<0.05$), limitations of activities ($P<0.05$), emotional health problem ($P<0.05$), social activities ($P<0.05$), pain ($P<0.05$), energy and emotions ($P<0.05$). Using splints significantly improved the quality of life of patients, but there was no significant difference between two splints in improving the quality of life.

Conclusion: Prefabricated and custom-made splint improve quality of life in elderly patient with the first carpometacarpal joint osteoarthritis.

Keywords: Quality of life, Osteoarthritis, First carpometacarpal joint, Splint

* **Corresponding Author:** Arazpoor M (MSc), E-mail: arazpoor@yahoo.com

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