Abstract Number: 18131

Functional evaluation of hyaluronic acid infiltration in the subtalar joint of patients with posttraumatic osteoarthritis

Fernanda Ferreira Gomes1, Henrique Mansur1, Mariana Silva Gomes1, Daniel Alves Ramalho1, Isnar Moreira de Castro Junior1
1. Instituto Nacional de Traumatologia e Ortopedia, Rio de Janeiro, RJ, Brazil.

ABSTRACT

Objective: To assess the efficacy of intra-articular viscosupplementation in patients with symptomatic subtalar osteoarthritis after calcaneal fracture.

Methods: Thirty-eight patients with a mean age of 50 years were divided into 3 groups: hyaluronic acid (HA) alone, corticoids alone or hyaluronic acid and corticoids combined. Three consecutive doses of the appropriate medication were administered at one-week intervals. The patients were evaluated for pain and hindfoot function using the American Orthopedic Foot and Ankle Society (AOFAS) scale and the visual analog scale (VAS) at 4 different timepoints (before infiltration and 4, 12 and 24 weeks after infiltration).

Results: There was significant improvement in the AOFAS score (from medians of 55 and 73 at baseline to 99 and 100 after 24 weeks; p<0.001) and the VAS score (from medians of 8 and 7 before infiltration to 1 and 2 at 24 weeks after infiltration; p<0.001) scores in the groups with hyaluronic acid alone and in combination with corticoid, respectively. In group 2, the scores improved after only 4 weeks (from 83 to 91.5 and from 7 to 5), returning to near-baseline values at the end of the follow-up (from 83 to 82.5 and from 7 to 7).

Conclusion: Infiltration with hyaluronic acid was effective and safe and should be included in the therapeutic arsenal of conservative treatments for symptomatic posttraumatic subtalar osteoarthritis.

Keywords: Osteoarthritis; Viscosupplementation; Subtalar joint.