

## Abstract Number: 18131 Functional evaluation of hyaluronic acid infiltration in the subtalar joint of patients with posttraumatic osteoarthritis

Fernanda Ferreira Gomes<sup>1</sup>, Henrique Mansur<sup>1</sup>, Mariana Silva Gomes<sup>1</sup>, Daniel Alves Ramalho<sup>1</sup>, Isnar Moreira de Castro Junior<sup>1</sup>

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.

