

A COMPARISON OF HYALURONIC ACID AND AND BETAMETHASONE IN THE TREATMENT OF OSTEOARTHRITIS OF THE THUMB: A RANDOMIZED, EVALUATOR-MASKED, SINGLE-CENTRE STUDY

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Purpose: To compare the efficacy and safety of ultrasound-guided local injections of hyaluronic acid (HA) (Suplasyn[®] 500-1000 kDa) and betamethasone in the management of patients with osteoarthritis of the thumb.

Methods: Patients of both sexes, aged > 40 years, diagnosed with osteoarthritis of the thumb (Kellgren-Lawrence grade II and III) according to the ACR criteria were included in the study. Patients were randomized (1:1) to ultrasound-guided local treatment with HA or betamethasone. A total of three local injections of active medication were scheduled at 7-day intervals. Paracetamol, 2 g/day, was allowed as rescue medication. Assessments performed at baseline and at 7, 14, 30, 90 and 180 days included pain evaluation with a 100-mm visual analogue scale (VAS), Dreiser's functional index (score 0-30), and global evaluation of efficacy by the investigator and the patient. The Student's t test or the Mann-Whitney U test for continuous variables and the chi-square test for categorical variables were used.

Results: In both study groups (40 patients in each group), VAS scores at the follow-up assessments showed a significant decrease as compared with baseline, but differences between the groups of HA and betamethasone were not statistically significant. In both groups, maximal pain relief occurred at 30 days. Scores of the Dreiser's functional index decreased significantly in both groups as compared with baseline, but at 90 days in which maximal improvement was also seen, HA-treated patients scored 5.50 and betamethasone-treated patients scored 10.0 (P = 0.04). A trend towards a greater clinical improvement in the HA group compared with the betamethasone group was also recorded at 90 days in the patients' assessment of efficacy (P = 0.08). Local adverse events did not occur.

Conclusions: Ultrasound-guided local injections of HA and betamethasone were both effective and well tolerated for the management of patients with osteoarthritis of the thumb, although HA seemed to provide better functional benefits than betamethasone.