

Stahl S, Karhs-Safir I et al. Comparison of Intraarticular Injection of Depot Corticosteroid and Hyaluronic Acid for Treatment of Degenerative Trapeziometacarpal Joints. J Clin Rheumatol 2005;11:299-302.

Design: Randomized clinical trial

Brief summary of findings:

- 52 patients (6 men, 46 women, mean age 62) with symptomatic grade II osteoarthritis of the trapeziometacarpal joint were treated in a hand surgery unit at Tel Aviv University
- All received one intraarticular injection, and were randomized to either 40 mg methylprednisolone (n=25) or 15 mg sodium hyaluronate (n=27)
- Outcomes included pain at rest and after activity by VAS, grip strength, pinch strength (lateral, 2 point, and 3 point), and functional dexterity measured by the Purdue Pegboard Test (PPT)
- Evaluations done at baseline and repeated 1, 3, and 6 months after injection
- Both groups had significant decrease in pain VAS at rest and after activity, recorded after 1 month and maintained at 6 months; there was no difference between groups
- Grip strength improved in the steroid group at 1, 3, and 6 months;
- Grip strength improved in the hyaluronate group by the end of 6 months, but not at 1 or 3 months
- Pinch strength and PPT did not improve in the steroid group, but did improve in the hyaluronate group at the 3 month and 6 month evaluations

Authors' conclusions:

- Initial treatment of grade II trapeziometacarpal joint arthritis is effectively done with intraarticular hyaluronate
- Hyaluronate restores thumb function more effectively than steroid injection

Comments:

- Methods are sketchily presented; inclusion and exclusion criteria are not explained
- Strength and functional measurements were not clearly blinded to treatment, and it is not explained how they were measured (once vs. average of 3 attempts, pain-free or maximal grip strength)
- Values of the strength and function in Tables 3 and 4 are very similar between groups, and the improvement, measured by paired t-tests, is likely to be due to the slightly lower baseline values of the hyaluronate group
- The analysis of function and strength therefore does not control for regression to the mean, and the between-group difference is negligible

Assessment :Inadequate (methods unclear, group difference unconvincing)