

**Roux C, Fontas E, et al Injection of intra-articular sodium hyaluronidate (Sinovial®) into the carpometacarpal joint of the thumb (CMC1) in osteoarthritis. A prospective evaluation of efficacy. Joint Bone Spine 2007;74:368-372.**

Design: Randomized clinical trial

Brief summary of findings:

- 42 patients (3 men, 39 women, mean age 64.8) with osteoarthritis of the basal joint of the thumb were enrolled in a study of hyaluronate in a university setting in Nice, France
- Eligible if they had grade 2, 3 or 4 Kellgren-Lawrence osteoarthritis which had been refractory to other therapeutic interventions
- Excluded if they had symptomatic arthritis on any other digit, hand trauma, infection, coagulation abnormalities, had used steroid injection in previous 6 months, or had previous hyaluronate injection
- All received 1 ml intraarticular hyaluronate, and were randomized to one injection (n=14), two weekly injections (n=14), or three weekly injections (n=14)
- Outcome measures were pain VAS and the Dreiser functional index, a scale based on difficulty with activities of daily living involving the hands
- Outcomes were compared at baseline, at 1 month, and 3 months [presumably after randomization]
- No between-group differences were measured at any of the 3 evaluations
- Within-group pain decreases were seen in the two injection group and in the three injection group, but not in the single injection group
- Five patients dropped out of the study, all with Kellgren-Lawrence grade 3 disease, three for lack of efficacy and two for non-attendance to scheduled visits; 2 from the single injection, 1 from the two injection, and 1 from the three injection group
- Pain and/or swelling was moderate and occurred equally in all three groups

Authors' conclusions:

- No significant differences between groups was observed for pain or function, and a dose-response relationship cannot be inferred
- Intra-articular hylan can be effective on pain and functionality in the first month, with effects persisting until 6 months

Comments:

- Inclusion criteria include being "refractory to other therapeutic interventions," but it is not clear what previous interventions were required for entry into the study; duration of symptoms also not clear
- Confidence intervals are not presented; the divergence of VAS lines in Figure 2 may very wide, given that the sample size is very small

Assessment: Inadequate for any evidence statement concerning hylan injection