Hyaluronic acid in the treatment of osteoarthritis of the small joint

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Introduction

Osteoarthritis (OA) of the small joints of the foot are prevalent and present a dilemma for many clinicians. We have previously described treatment of hyaluronic acid (HA) in the 1st joint of the great toe. This study describes a larger cohort over a longer term HA treatment in the metatarsal phalangeal (MTP).

Objectives

To determine the effectiveness of intra-articular injection of HA on pain and function in patients with OA of the 1st MTP joint.

Methods

498 patients received at least 2 series (2-7) over 5 years of intra-articular HA into the MTP administered 3-weekly (Suplasyn m.d. 0.7 ml; 10 mg/ml).
No other treatment modalities were administered during the 2 weeks prior to and during the study and all patient were « washed-out » for any other systemic or topical therapy for OA.
Baseline assessments of pain and function included VAS at rest and weight-bearing, patient satisfaction and adverse events.
Assessments were collected following the 1st series and just prior to subsequent series.
Differences pre-post were compared using t-tests and considered significant at $p<0.05$.

Results

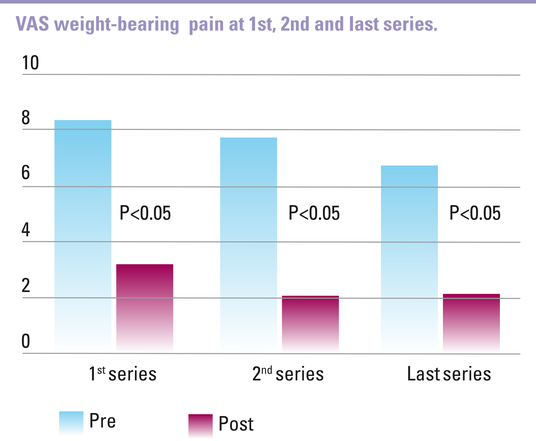
Subjects were aged 61±12 years, 38% male with BMI (29±3). Duration of symptoms was 5±7 years. The mean number of series of intra-articular HA injections was 3±1 with an interval of 33±11 weeks between series. Significant improvement in both rest and weight-bearing pain indices were observed at both first and second series (8.3 vs 3.1) to 7.9 vs 2.1cm and last injection series (6.8 vs 2.2). There was a small but non-significant reduction in VAS rest pain between the first and last series. There were no serious adverse events reported. HA injections were highly satisfactory at each series.

Evaluations

Baseline characteristics

Patients (n)	498
Age	61 ± 12 years
BMI	29 ± 3
Duration of symptoms	5 ± 7 years
Number of series of intra-articular HA	3 ± 1
Mean interval between series (weeks)	33 ± 11 weeks

Efficacy



Safety

➔No serious adverse event reported

Patient satisfaction

➔HA injections were highly satisfactory at each series

Conclusions

➔**Intra-articular injection of HA in the small joint of the foot produced significant pain reduction with no serious adverse events over a long-term follow up.**

➔**Injections showed a high degree of patient satisfaction and should be considered by clinicians who treat these patients.**