The outcome of joint injections in patients with osteoarthritic pain

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Introduction

Severe chronic pain occurs in 19% of adult Europeans, with significant impact on quality of life (1). Osteoarthritis accounts for more disability among the elderly than any other disease, with prevalence increasing with age. Symptomatic osteoarthritis affects up to 15% of the population worldwide with the knee, hand, and hip being the most common sites (2). Severe or refractory pain is one of the indications for knee and hip arthroplasty, and may have significant financial implications (3). Pain management with intra-articular steroids may offer symptomatic relief for such patients.

Method

We treated 110 consecutive patients (62 females and 48 males) suffering from OA-joint pain for more than 6 months, affecting the shoulder (43), knee (28) or hip (39) joints, with an intra-articular injection of depomedrone (methylprednisolone) 120 mg (3 mls) and Levobupivacaine 2.5 mg/ml (2-5 mls). Each patient was asked to complete a Pain Numeric Scale (PNS) at baseline (prior the injection) and each week for 12 weeks. A total number of 98 patients returned a completed PNS. They were 54 female and 44 male patients. The average age was 59.3 (41-84).

DEMOGRAPHIC DATA

Total Number of Patients:	110
Number of the returned questionnaires:	98
Age:	41-84 (average 59.3)

- Number of patients
- Hip: 39 (35*)
- Knee: 28 (24*)
- Shoulder 43 (39*)

* Number of returned the questionnaires

- Aseptic cleaning of the skin with chlorhexidine gluconate 2%
- Landmark method
- Methylprednisolone (Depomedrone) 120 mg
- Levobupivacaine 2.5mg/ml: 2-5 mls

Results

The mean baseline pain score was 8.04 (shoulder), 8.03 (hip) and 7.8 (knee). The mean weekly pain intensity was reduced in all patients with the highest pain relief reached at week 5 for hip (4.9) and shoulder (4.6), and at weeks 4 for knee (3.9). Pain score increased weekly and reached 6 for the shoulder, 6.5 for the hip and 6.1 for the knee at week 12.

Knee

Hip

Shoulder

* P value <0.005 at all weeks compared to baseline

Conclusion

Intra-articular injections provided up to 38% reduction in pain, although temporary, with no side effects reported. Intra-articular injections have several benefits. Their role in the reduction of moderate to severe pain may delay the requirement of surgical interventions such as arthroplasty, with subsequent implications on cost reduction through revision surgery. It also offers an alternative to individuals in whom arthroplasty is not suitable or deemed risky.

References

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