

# HYALURONAN VS. STEROID INJECTION

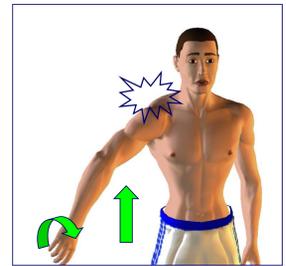
## FOR SUBACROMIAL IMPINGEMENT OF THE SHOULDER

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### 1. Introduction

- Subacromial impingement is a common shoulder problem
- Corticosteroid is the traditional substance injected into the bursa
- Corticosteroids are associated with complications, such as tendon rupture, hyperglycaemia and lipoatrophy <sup>5,7,8</sup>



• Hyaluronans are a normal proteoglycan component of hyaline cartilage and synovial fluid, and play an important role in joint lubrication and metabolism.

• Hyaluronans offer anti-inflammatory properties, mechanical barrier to pain receptors and inflammatory cells, reduce free radicals and stimulate endogenous hyaluronan production <sup>1,2,6</sup>.

• Exogenous Hyaluronans have been shown to be beneficial in Osteoarthritis of the knee and rotator cuff disease in the shoulder <sup>1-5</sup>.

### 2. Aim

To compare a synthetic Hyaluronan (Ostenil) to a corticosteroid injection (Depomedrone) for primary subacromial impingement of the shoulder.



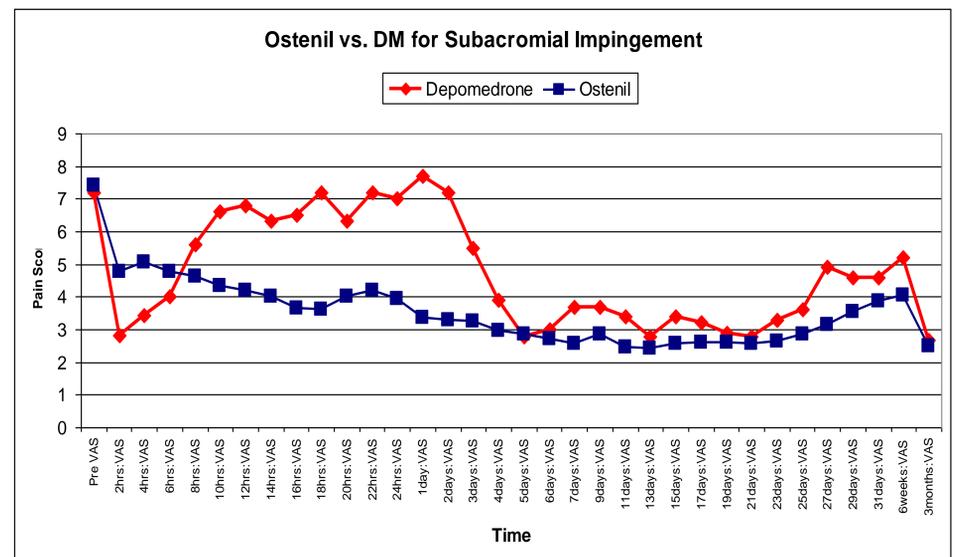
### 3. Methodology

- Thirty one patients with primary subacromial impingement of the shoulder.
- randomly given a subacromial injection of either a 40mg Depomedrone or Ostenil.
- No patients had undergone previous surgery.
- All had physiotherapy following the injection.
- Patients were given a Pain Diary with a ten point visual analogue scale to complete over a three month period.



### 4. Results

- There was no difference between the two groups with regard to age and sex.
- Both steroid and Ostenil reduced the pain score in the first two to four hours post-injection
- In the Depomedrone group the pain score increased significantly from 12 hours to 3 days post-injection. This effect was not observed with Ostenil.
- This difference was significant ( $p < 0.05$ ) between 18 hours and 3 days post-injection.
- From 4 days the pain score is similar, with an equal reduction in pain in the two groups.



### Conclusion:

Ostenil Hyaluronan appears to be as effective as Depomedrone in reducing subacromial impingement pain, but does not produce the pain surge associated with Depomedrone in the first few days post-injection.

### References

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