

THE IMPORTANCE OF THE INJECTED VOLUME
OF CORTICOSTEROIDS AND XYLOCAINE
IN THE TREATMENT OF SUBACROMIAL
IMPINGEMENT SYNDROME.

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Introduction

- ❑ The impingement syndrome was described by Neer as a series of pathologic changes in the supraspinatus tendon and presents with pain over the anterolateral aspect of the shoulder.
- ❑ Conservative treatment of this condition involves injection of steroids and xylocaine.
- ❑ The purpose of this study was to evaluate the the significance of the volume of injected corticosteroid and xylocaine in the treatment of subacromial impingement syndrome (SIS).



Patients -Methods

- **Time Period:** 1/1/2000 and 1/12/2001
- **Patients:** 21 patients with SIS without the presence of other pathologic lesions
- **Clinical examination:**
clinical findings and positive impingement test.
- **Group A:** 11 patients (6 males, 5 females)
mean age 52.4 years
- **Group B:** 10 patients (4 males, 7 females)
mean age 57.6 years

Patients -Methods

Prospective, randomized, controlled, double blind trial

- **Group A** received

12 mg of betamethasone (2 ml) and 1 ml xylocaine 2%

Total volume **13 ml**

- **Group B** received

12 mg betamethasone (2 ml) and 8 ml xylocaine 2%

Total volume **20 ml**

Outcome Measures

- Mean duration of symptoms prior to the injection
- Improvement in pain (10-point VAS scale)
- Impingement sign
- Functional assessment – 5 Activities of Daily Living (score 0-5)

Mean duration of symptoms prior to the injection

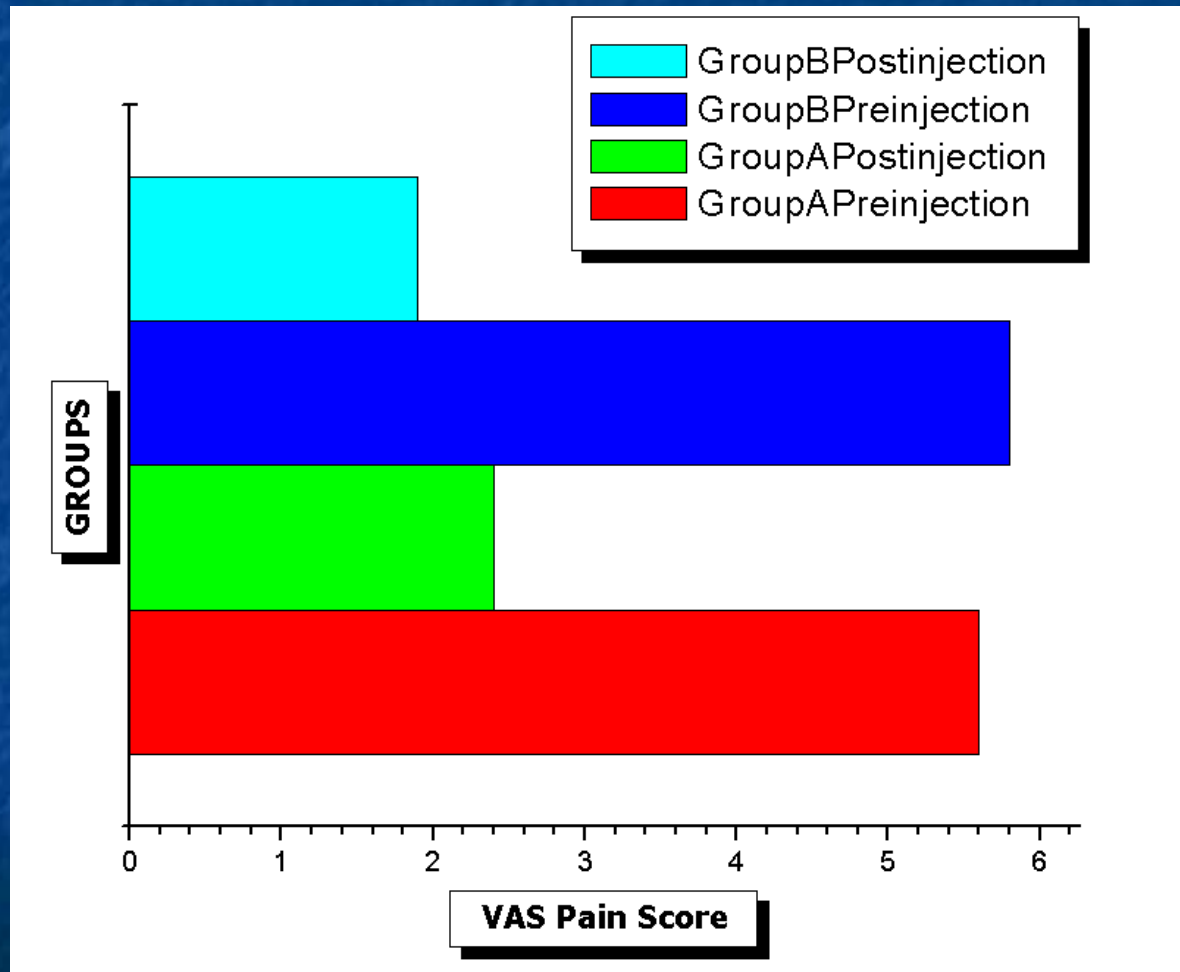
Group A: 12.4 months

Group B: 11.6 months

- ✓ No significant difference in group demographics
- ✓ No complication related to the treatment

Improvement in pain (10-point VAS scale)

at latest follow-up

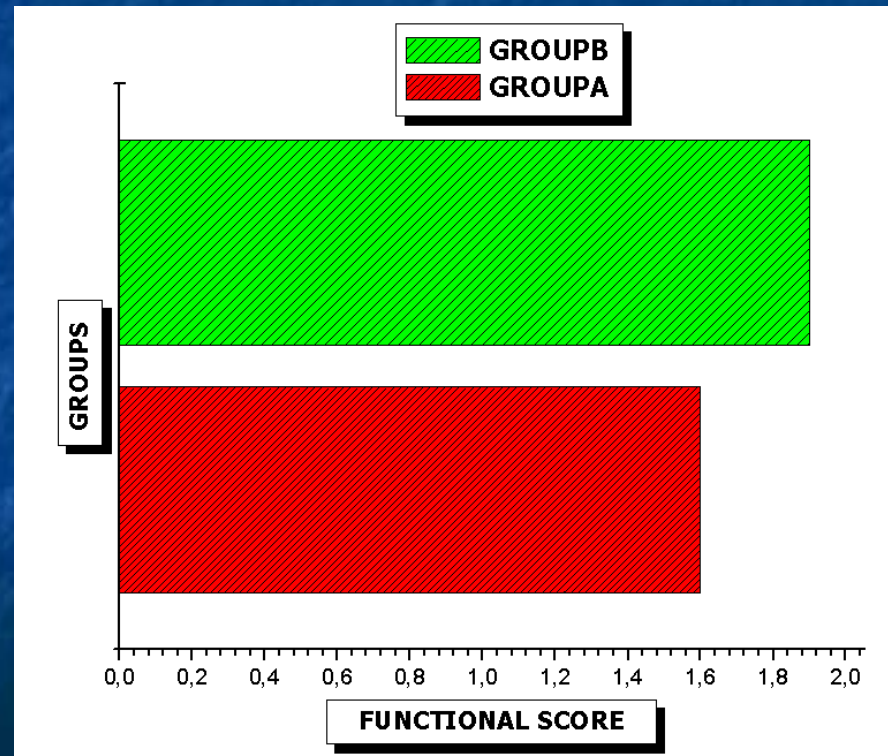


Negative Impingement Sign

at latest follow-up

GROUPS A & B: 9 patients

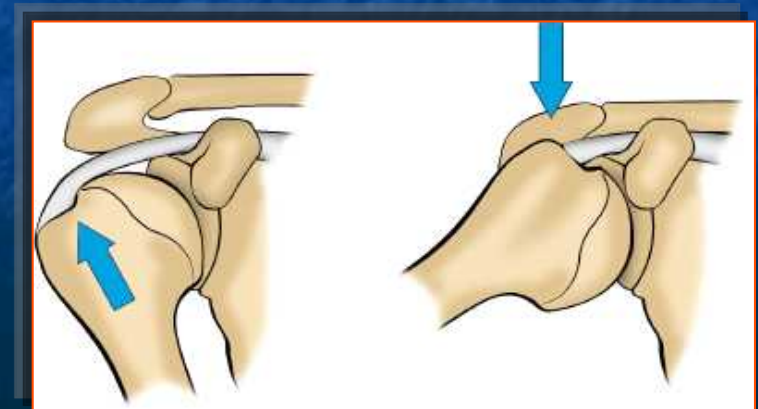
Functional assessment – 5 Activities of Daily Living (score 0-5)



Statistically
Significant
Difference

Conclusion

The injection of a minimum volume
of steroids and xylocaine
influences the
improvement of SIS symptoms.



References

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