

# FROZEN SHOULDER ENCAPSULATES THERAPY CHALLENGES

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Robert Donatelli, Ph.D., P.T., Joseph S. Wilkes, M.D., Will Hall, P.T., D.P.T., Steve Cole, Ph.D.

The primary goal of therapy in the treatment of adhesive capsulitis is to restore glenohumeral joint ROM.

Static progressive stretch (SPS) has been proven effective in permanently elongating shortened tissues. The Joint Active Systems (JAS) Shoulder device provides SPS in the external rotation plane.

This prospective randomized study compared shoulder ROM gains achieved with a physical therapy program alone versus a physical therapy program and the use of a JAS Shoulder device. A secondary goal was to determine if a correlation exists between stretching to increase external rotation and achieving gains in elevation ROM.

Study results showed patients who used the JAS Shoulder device gained significantly greater ROM in both external rotation and elevation.



## Patient Population

- 30 patients with a diagnosis of primary, second- or third-stage adhesive capsulitis.
- Passive external rotation less than 60° and elevation less than 140°.

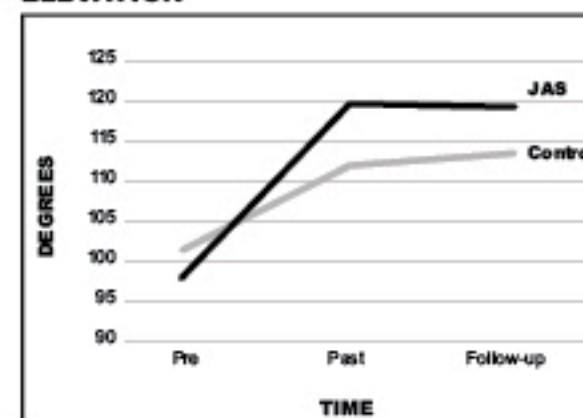
## Methods

- Patients were randomized to two groups.
- Both groups received the same physical therapy twice a week for three weeks.
- Group 1 was given a home program of active exercises to maintain ROM gained in the clinic.
- Group 2 used the JAS Shoulder device twice a day for seven days, performing 30-minute SPS sessions in external rotation only.
- Goniometric measurements were measured before the first session, after the last therapy session (post-treatment) and during the follow-up session 10 days later.

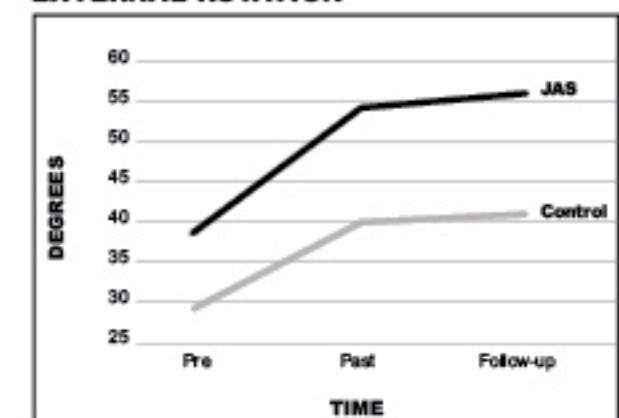
## Results

- **External Rotation:** Group 2 gained 19°, Group 1 gained 12°.
- **Elevation:** Group 2 gained 20°, Group 1 gained 11°.
- Elevation gains in Group 2 were significant because the Group 2 protocol involved stretching in external rotation only.
- A ratio of 1:1 with respect to gains in passive external rotation and active elevation ROM was seen in the JAS SPS group.
- Patients using the JAS Shoulder device reported less pain during and after treatment.
- Compliance was 100% for patients using the JAS Shoulder device.
- Using the JAS Shoulder device in conjunction with manual therapy had a significant effect on improving external rotation and elevation.

ELEVATION



EXTERNAL ROTATION



Full Study Available.

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