TREATMENT OF ADHESIVE CAPSULITIS OF THE SHOULDER WITH A STATIC PROGRESSIVE STRETCH DEVICE: A PROSPECTIVE, RANDOMIZED STUDY

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Adhesive capsulitis of the shoulder is a debilitating musculoskeletal disorder that has significant implications for activities of daily living for affected patients. Stress relaxation and static progressive stretch (SPS) are techniques that may be used to nonoperatively restore range of motion (ROM) in the setting of adhesive capsulitis. This study prospectively compares standard physical therapy alone to a combination of physical therapy with a Joint Active Systems (JAS) SPS orthosis to evaluate differences in shoulder ROM, functional outcomes as measured by the DASH questionnaire, and pain as measured with a VAS scale.

Methods

- A prospective, randomized, blinded, controlled study was conducted
- 60 patients with adhesive capsulitis were enrolled - 30 in control group, 30 in treatment group
- Control group received 4 weeks of PT
- Treatment group received PT and used a JAS SPS shoulder orthosis (Joint Active Systems, Effingham IL) for 4 weeks
- Abduction (active and passive), External Rotation, DASH scores, and VAS pain scores were recorded at 4, 12, and 24 weeks follow-up

Results

- The treatment group (PT and JAS SPS) demonstrated a significantly greater improvement in all ROM categories and DASH scores.
- Mean active abduction ROM gains: 76° vs 46° (control)
- Mean passive abduction ROM gains: 64° vs 37° (control)
- Mean external rotation ROM gains: 53° vs 30° (control)
- Mean decrease in DASH scores: 68 vs 58 (control)
- Mean decrease in VAS pain scores: 3 vs 4 (control)

Conclusion

- Use of a JAS SPS orthosis may be a non-invasive and cost effective treatment to allow patients with adhesive capsulitis to return to function sooner.
- A JAS SPS orthosis should be considered as an adjunct to physical therapy for all patients with shoulder adhesive capsulitis, to shorten rehabilitation times and to improve range of motion and clinical outcomes.

Full Study Available
Please contact JAS at 800-879-0117 or info@jointactivesystems.com
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