

CLINICAL OVERVIEW

ASSESSMENT OF STATIC PROGRESSIVE STRETCH FOR THE TREATMENT OF SHOULDER STIFFNESS: A PROSPECTIVE CASE SERIES

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Adhesive capsulitis is a debilitating disease that can have a variety of etiological origins and can be a challenge to effectively treat. A common pathological sequence of fibrosis or soft tissue contracture surrounding the glenohumeral joint leads to decreased shoulder range of motion (ROM). The purpose of this study was to evaluate the use of a Joint Active Systems (JAS) patient-directed static progressive stretch (SPS) orthosis for the treatment of shoulder stiffness.

Twenty – three prospective patients with adhesive capsulitis who had failed conventional physical therapy were studied. Treatment comprised one to three 30 - 60 minute SPS sessions during which patients adjusted the degree of stretch at 5-minute intervals. Compliance, ROM, function, patient satisfaction, and complications were assessed.



96% of patients showed significant improvement in shoulder ROM. Authors concluded that a JAS shoulder orthosis utilizing SPS is a useful adjunct for the treatment of persistent shoulder stiffness refractory to conventional therapy. Study results were comparable or superior to other splinting devices and other methods of physical therapy.

Methods

- 23 patients with adhesive capsulitis underwent treatment with a JAS SPS Shoulder device.
- Orthosis use consisted of 30 – 60 minute sessions, one to three times per day.
- SPS therapy commenced after patients experienced no improvement in ROM for 2 consecutive weeks while receiving standard PT.
- ROM, compliance, treatment time, shoulder function (QuickDASH Outcome Measure), and patient satisfaction were measured.
- Data was collected upon therapy completion and at a 12 month follow - up.

Results

- Mean treatment time: 10 weeks (range 4 – 19 weeks)
- Mean daily treatment time: 60 minutes/day
- Mean ROM gains: Abduction: 46° External Rotation: 26° Internal Rotation: 18° Forward Flexion: 23°
- Mean QuickDASH score improvement: 30 points at 1 year follow-up
- Mean satisfaction score: 8/10
- Compliance was 100% (Minimum of one session / day for at least 2 weeks).
- There were no reports of pain or complications related to JAS SPS device use.

Conclusion

- A patient directed JAS orthosis that utilizes SPS is a useful treatment for shoulder stiffness, and results are comparable or superior to other splinting devices and methods of physical therapy.
- Abduction and forward flexion ROM significantly increased with application of JAS SPS device stretching in external and internal rotation only.



Full Study Available

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