

Outcome Following Non-Operative Management of Rotator Cuff Tears

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Purpose/Hypothesis: To determine the outcome of patients with rotator cuff tears (RCT) who received non operative management with a physical therapist. We sought to demonstrate whether improvements in Penn Shoulder Score (PSS) from initial evaluation to discharge were maintained at long term follow up after the conclusion of care.

Number of Subjects: 19 subjects treated for rotator cuff disease at our facility met the inclusion criteria of an MRI or ultrasound documented rotator cuff tear, initial and discharge impairment measures and PSS, and were able to be successfully contacted for follow up data were included in this study. Of the 19 subjects, 7 had a massive rotator cuff tear (Ma-RCT), 1 had a large rotator cuff tear (L-RCT), 5 had a medium rotator cuff tear (Me-RCT), 5 had a small rotator cuff tear (S-RCT), and 1 had a partial rotator cuff tear (P-RCT).

Materials/Methods: Subjects were contacted by phone, gave their verbal consent, and were asked to verbally complete the Penn Shoulder Score (PSS). Of the 19 subjects 13 were females and 6 were males. The average age of all 19 subjects was 72.84 ±6.48 years. The average number of visits for all subjects was 9.58±4.96. The average time from initial evaluation to discharge was 2.03 months. The average time from discharge to follow up for all subjects was 43 months.

Results: Of the 19 subjects available for follow up, 1 had received a cortisone injection and 1 had undergone a rotator cuff repair. The average total score of the PSS at initial evaluation was 52.11, 79.74 at discharge, and 80.59 at follow up. The average pain score of the PSS at initial evaluation was 18.21, 25.58 at discharge, and 24.95 at follow up. The average satisfaction score of the PSS at initial evaluation was 2.42, 7.53 at discharge, and 8.37 at follow up. The average total function score of the PSS at initial evaluation was 31.47, 46.63 at discharge, and 47.27 at follow up.

Conclusions: Non-operative rehabilitation with a physical therapist for rotator cuff tears of varying sizes can result in good long term outcome. Patients who received physical therapist services for the management of their rotator cuff tear showed significant improvements in pain, function, and overall satisfaction as demonstrated by an increase in their PSS from initial evaluation to discharge. Patients were able to maintain these improvements following discharge at the long term follow-up.

Clinical Relevance: Clinicians can use the information gained from this study to support the efficacy of physical therapist services for the management of rotator cuff tears as an alternate option to surgery.