



Therapy Solutions News

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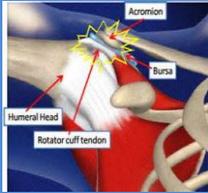
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Thank you for your continued support!

We recently switched to Electronic Medical Records in order to keep up with continuously changing Medicare requirements and to improve communication with referring physicians and patients.

A single sub-acromial injection of NSAID (Ketorolac) can be more effective than a single corticosteroid injection (Triamcinolone) in the treatment of External Shoulder Impingement Syndrome while decreasing the potential side effects of corticosteroids.

(Journal of Shoulder and Elbow Surgery, March 2013)

(Level 2 evidence)

Physical therapy is effective in treating atraumatic full thickness rotator cuff tears.

(This study won the 2012 Neer Award for clinical research). (Journal of Shoulder and Elbow Surgery, March 2013) (Level 4 evidence) This prospective multicenter cohort study examined the effect of an earlier published physical therapy protocol in treating patients with atraumatic full thickness RC tears. This protocol was derived from a systematic review. The study followed 422 patients between 18 and 100 years old that met the inclusion criteria. The physical therapy protocol consisted of posture correction ex's, active assisted ROM, training of scapular muscles, daily posterior capsule stretches and strengthening RC and scapular stabilization ex's. The therapists also performed manual mobilizations. At week 6 (8 visits) patients had the choice to either discontinue therapy in case they felt "cured", continue therapy in case they felt improved or discontinue therapy to undergo surgery (6% did opt for surgery). At the 2 year follow up mark only 26% had chosen to undergo surgery. The authors noted that physical therapy is not ideal for all patients. Some patients may elect to have surgery early on. Other patients are at risk for symptom progression or RC tear progression.

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Inclusion criteria:

- Shoulder pain with passive and/or active abduction in 60°-120° arc of motion
- Positive Neer's test
- Positive Kennedy-Hawkins test
- Diagnosis of subacromial bursitis based on tenderness to palpation antero-lateral to the acromion

Was the assignment of patients to treatments randomized? **Yes.** 24 patients were randomized to the corticosteroid group and 24 patients to the NSAID group.

Were the groups similar at the start of the trial? **Yes.** The 2 groups were comparable with respect to age, gender and laterality. In addition patients in both groups scored similarly on the UCLA Shoulder Rating Scale.

Aside from the allocated treatment, were groups treated equally? **Yes.** Patients in both groups filled out the UCLA Shoulder Rating Scale and a VAS. A hand held goniometer was used to measure their pre-treatment shoulder ROM (flexion and abduction). After the initial evaluation all qualifying patients received a subacromial injection using a posterolateral approach and the needle was directed towards the coracoid process.

Were all patients who entered the trial accounted for? **No.** 10 patients were lost for follow up (7 in the Steroid group and 3 in the NSAID group). In addition, one patient's consent expired (steroid) and 5 patients were later diagnosed with a RC tear (MRI) (1 steroid and 4 NSAID). An Intent-to-treat analysis was not performed.

Were the patients and clinicians kept "blind" to which treatment was being received? **Yes.** This was a double blinded randomized clinical trial. Pre-prepared, unlabeled, unidentifiable syringes were used.

Were measures objective? **Yes.** The UCLA Shoulder Rating Scale and VAS were used.

How large was the treatment effect? Both groups demonstrated improved outcome measures at the 4 week follow up. The Ketorolac group scored significantly better on the UCLA Shoulder Outcome measure: 7.5 for the NSAID group versus 2.13 for the steroid group. Active abduction increased to 151° for the NSAID group, while the steroid group's active abduction actually decreased to 134°. This difference was statistically significant (P= .03)

This study provides evidence that injectible NSAID's yield equal if not superior results as compared to corticosteroid injections without the risks of cortisone injections. The authors are unaware of any study that demonstrates adverse effects from injectible NSAID's. They also reference a study that compared injectible NSAID's with placebo that concluded that 4x weekly injections of Tenoxicam was superior to placebo injections (1). The authors noted several limitations of their study.

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References

- (1) Itzkowitch D, Ginsberg F, Leon M, Bernard V, Appelboom T. Peri-articular injection of tenoxicam for painful shoulders: a double-blind, placebo controlled trial. Clin Rheumatol 1996;15:604-9