

## Exercise in the treatment of rotator cuff impingement: A systematic review and a synthesized evidence-based rehabilitation protocol

John E. Kuhn, J Shoulder Elbow Surg (2009) 18, 138-160

## Setting the scene:

to evaluate the role of exercise in treating rotator cuff impingement and to synthesize a standard evidence-based rehabilitation protocol.

## What did they do?

This systematic review of randomized controlled trials evaluates the best evidence for the role of exercise in the treatment of rotator cuff impingement syndrome.

The general findings from this study are:

- 1. Exercise is effective as a treatment for the reduction of pain,
- 2. Home exercise programs may be as effective as supervised exercise, yet
- 3. The effect of exercise may be augmented with manual therapy,
- 4. Acromioplasty with postoperative exercise also produces improvements in symptoms, and
- 5. There may be a role for bracing; however, this interesting approach requires further study.
- 6. Ultrasound as a therapeutic modality has been evaluated by a number of studies. It is beyond the scope of this review to evaluate the effectiveness of ultrasound; however, multiple systematic reviews state that ultrasound is of little value in treating patients with shoulder pain.

## Takeaway message:

This systematic review is one of the best available evidence for exercise in the treatment of impingement syndrome and was able to generate a physical therapy protocol that has been shown to be effective in level 1 and level 2 studies. This evidence-based protocol can be used by clinicians treating impingement syndrome and can serve as a gold standard to reduce variables in future cohort and comparative studies to help find better treatments for patients with this disorder.