

# Effect of the Scapula Reposition Test on Shoulder Impingement Symptoms and Elevation Strength in Overhead Athletes

Tate, A.R., McClure, P., Kareha, S. and Irwin, D., 2008. Effect of the scapula reposition test on shoulder impingement symptoms and elevation strength in overhead athletes. *journal of orthopaedic & sports physical therapy*, 38(1), pp.4-11.

## Setting the scene:

The aim of this two-group, repeated measures design study was to determine whether **manually repositioning the scapula using the Scapula Reposition Test (SRT) reduces pain and increases shoulder elevation strength in athletes with and without positive signs of shoulder impingement.**

## What did they do?

One **hundred forty-two** college athletes underwent testing for clinical signs of shoulder impingement. Tests provoking symptoms were repeated with the scapula manually repositioned into greater retraction and posterior tilt. A **numeric rating scale** was used to **measure symptom intensity** under both conditions. **Isometric shoulder elevation strength** was measured using a **mounted dynamometer** with the scapula in its natural position and with manual repositioning. A **paired *t* test** was used to compare the **strength between positions**. The frequency of a **significant increase in strength with scapular repositioning**, defined as the minimal detectable change (90% confidence interval), was also assessed.

Of the **98 athletes** with a **positive** impingement test, **46** had **reduced pain** with scapular repositioning. Although repositioning produced an increase in strength in both the impingement and non-impingement groups a **significant increase in strength** was found with repositioning in only **26% of athletes with**, and **29% of athletes without**, positive signs for shoulder impingement.

## Takeaway message:

Manually repositioning the scapula resulted in a small reduction in pain during impingement testing in nearly half of the athletes. Manual repositioning of the scapula significantly increased strength in a subgroup of athletes, regardless of the absence or presence of impingement symptoms. The SRT is a simple clinical test that may potentially be useful in an impairment based classification approach to shoulder problems.