

## Rotator Cuff Impingement/Tears – **Do your patients require surgery?**



Below we review the most common shoulder condition that you will encounter and outline some subjective and objective findings which will assist you in the clinical setting.

### Rotator Cuff Impingement / Tear

By far the most common problem in the shoulder is rotator cuff (RC) impingement or RC tear. Typically the patient will report that their shoulder pain is either related specifically to a traumatic incident or of gradual onset.

RC impingement occurs when the space between the coracoacromial arch, the acromioclavicular (AC) joint and the glenohumeral (GH) joint is compromised.

#### Impingement can result from:

- encroachment from coracoacromial ligament hypertrophy and/or degenerative changes at the AC joint
- swelling of the RC tendons (this can result due to acute trauma or repetitive loading)
- excessive movement of the humeral head upwards. This is caused by minor GH joint instability and occurs when there is slight laxity of the GH capsule.

A patient with an RC tear or strain usually presents with a history of sudden pain in the shoulder. Minor tears generally present similarly to RC impingement and normally occur in younger people (20-50 years old). Significant or complete tears are more commonly seen in older people (50+ years old) who are typically predisposed to this injury due to degenerative changes in the tendon. There may or may not be a history of shoulder injury.





### On examination for RC impingement:

- There will normally be a painful arc on abduction and/or flexion
- Resisted tests will reproduce the patient's symptoms, most commonly with resisted contraction of the supraspinatus.
- There will be hypomobility and pain on passive accessory testing of the acromioclavicular joint.
- The posterior glenohumeral capsule and posterior RC will be tight creating a compressive force onto the subacromial space which leads to impingement and stress onto the RC.
- The impingement (Hawkins-Kennedy) test is positive (see image)



It is sometimes difficult to accurately differentiate a mild to moderate RC tear (whether it be acute or chronic) from an RC impingement problem. This is generally not a major concern as the two conditions are treated very similarly via a referral to a physiotherapist. If clinically it is suspected that there is a large tear, then an MRI may be appropriate.

### Do Your Patients Need Surgery And What Are The Current Recommendations?

Unless there is a major RC tear, physiotherapy should be the first treatment option.

- RC impingement or minor RC tears respond well to physiotherapy, and this is the preferred option over surgery.
- Moderate RC tears should undergo a period of physiotherapy before deciding whether surgery is required. Physiotherapy is shown to be as effective as surgery in the medium to long term, without the risks associated with surgery.
- Large to massive RC tears where there is a major loss of power and ROM physiotherapy may still be appropriate at this stage depending on the individual patient's circumstances. They should however be referred for an orthopaedic review first.

### On examination for RC tear:

- All the objective findings are similar to RC impingement, however active movements are generally more restricted and resisted tests are typically more painful and weak.
- A combination of supraspinatus weakness PLUS weakness of the external rotators PLUS a positive impingement test indicates a 98% likelihood of an RC tear.

### Summary

Shoulder surgery is a significant procedure and may have serious implications and recovery time associated with this treatment protocol. For this reason, it is advisable to refer patients to physiotherapy as the first port of call. As with most injuries the earlier these shoulder patients present to physiotherapy, the less likely that more invasive interventions will be required such as corticosteroid injections or surgery. We have the knowledge and the skills to enable your patients to be pain free.

Contact us to find out more about how we can help your patients reach their potential.

Call 1300 381 207

### References

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