Shoulder Impingement

Peter Halstead (M. Phty, PGDipSportMed, BspEx, MPNZ)

Shoulder impingement is not a diagnosis itself however it is a common cause of shoulder pain. Impingement occurs when your tendons or bursa become 'jammed up' or irritated in your shoulder joint. The tendons/bursa become impinged due to the shoulder bones rubbing on them when there is less space in your shoulder joint. The pain can be acute however in many circumstances the pain gradually occurs due repetitive shoulder movements.

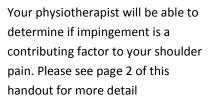
Your shoulder is the most complex joint in the body so there can be multiple reasons why impingement occurs. Poor training techniques, poor weight lifting form, and flexibility/strength imbalances of the many shoulder muscles are common contributing factors.

How do you know if you have shoulder impingement?

- Usually you will feel pain around your shoulder joint or down the upper 1/3 of the outside of your humerus (upper arm bone)
- Reaching behind you, lifting weight above your head, taking clothes on and off are common functional tasks that cause pain
- The first signs of impingement can be when you feel pain with mid-range shoulder movements and at the end of the range (e.g. between 80-120 degrees and from 170-180 degrees of shoulder flexion or abduction)

What should you do if you think you have shoulder impingement?

- Initial treatment involves stopping the activities that cause impingement pain
- In some cases non-steroidal anti-inflammatory drugs/medication (NSAID's) might assist in settling down your pain. *Although many physiotherapy patients are talking NSAID's with shoulder pain, New Zealand Physiotherapists are not legally trained to prescribe medication so it is highly recommended that you discuss medication use with your GP or pharmacist prior to taking them for shoulder pain
- An assessment with an experienced physiotherapist is recommended. In some circumstances hands on techniques (massage, dry needling, acupuncture, and shoulder mobilization) might assist in decreasing the initial pain
- If you have previously failed conservative treatment with a therapist, suffered an acute incident that caused your shoulder pain, or you have had the pain for a long period of time then your physiotherapist may send you for an ultrasound and x-ray of your shoulder. Despite not being necessary in most impingement cases, these tests can assist in identifying the exact structures that are being impinged.
- Possibly the most important aspect your physiotherapist will be able to assist you with is identifying the exact contributing factors the led to your pain in the first place and give you to tools you need to help correct these factors.



1705

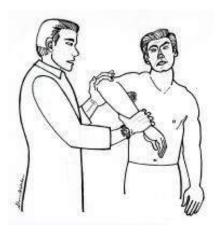
Painless

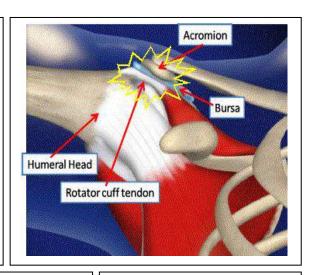
Glenonum painful arc

nainful an

1205

45%- 60%







Common weight lifting exercises that lead to shoulder impingement pain:



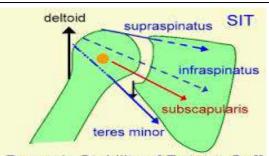
Common Postures that contribute to shoulder impingement pain:



What can you do to help decrease your shoulder impingement pain? You cannot directly affect degeneration of your upper arm and shoulder bones or any slight genetic abnormality of your shoulder bones however you can affect the muscles around your upper back, shoulder and chest. Finding the right balance of muscle strength and flexibility in this complex group of muscles will be essential if you are to decrease this pain in the long term. Your physiotherapist will be able to help identify these imbalances.

Keep in mind, building pure strength can 3-6 months, and even longer if you have had the shoulder pain/imbalance for a long period of time.

Work and training postures will also need to be addressed if you are to avoid this shoulder impingement pain returning in the future. Shoulder maintenance exercises may also be required in the long term.



Dynamic Stability of Rotator Cuff

A common imbalance is having weak rotator cuff muscles and an overdeveloped deltoid muscle. This imbalance itself can cause your humerus (upper arm bone) to raise up into your shoulder joint and reptitively impinge whenever you raise your arms up high or out to the side

This educational hand-out was developed by Peter Halstead in 2012. The content is based on the most up-to-date research available at the time and it is reviewed on a yearly bases. The information contained is for the general public. If you have current pain or issues with your health please discuss this with your health professional prior to beginning the exercises discussed. If you have any questions regarding the content of this hand-out please contact Peter at www.PTPete.co.nz

Like us on Facebook <u>https://www.facebook.com/ptpete.co.nz</u> OR visit <u>www.PTPete.co.nz</u>