



FIT FACTS Series



The Management of Rotator Cuff Disease

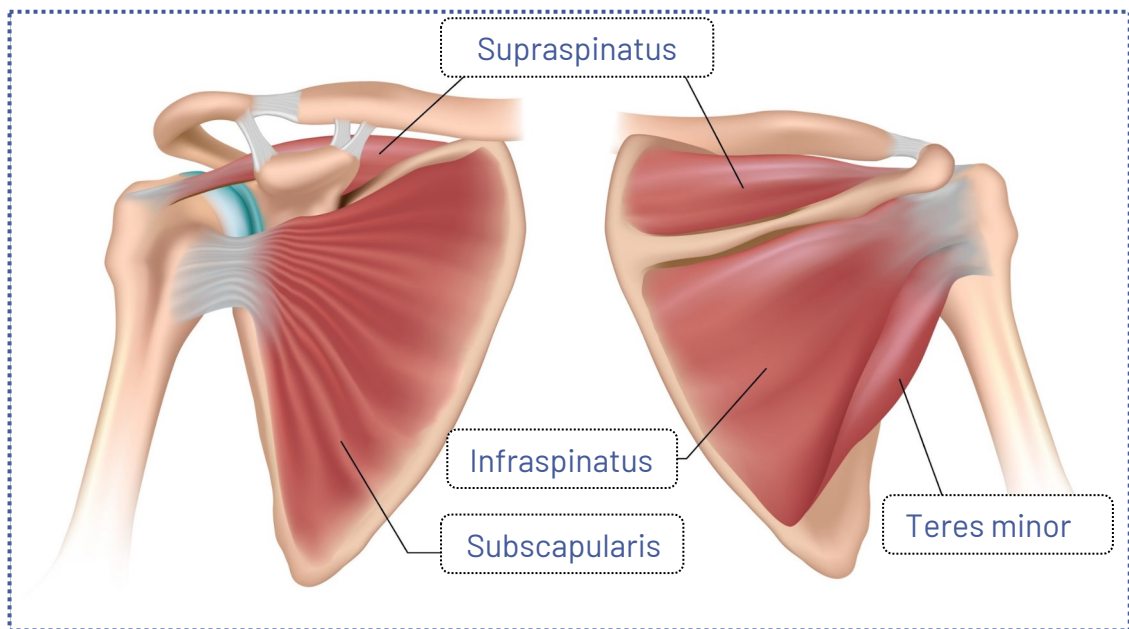
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What is the Rotator Cuff?

The shoulder has rotator cuff muscles and tendons that surround the shoulder and shoulder blade. They help keep the shoulder in place and stable throughout arm movements.¹

Rotator Cuff Muscles & Tendons



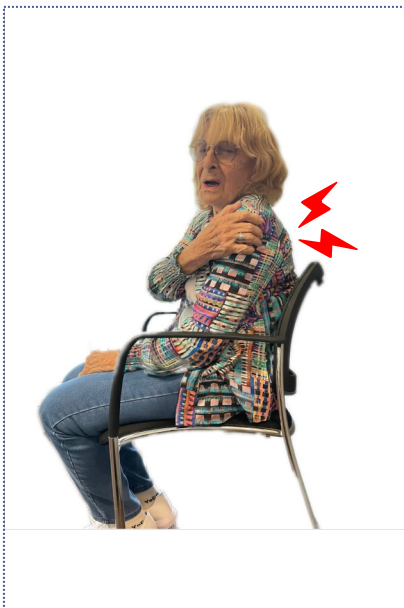
Front view

Back view

What is Rotator Cuff Disease?

It is a set of conditions which includes:^{1,2}

- ✧ Rotator cuff tendon inflammation (tendonitis) or collagen degeneration (tendinopathy)
- ✧ Inflammation of a sac of tissue under a bony structure in the shoulder (subacromial bursitis)
- ✧ Partial or full tears of the rotator cuff muscles or tendons
- ✧ Entrapment of the rotator cuff between bones when moving the arm up to the side causing pain (impingement syndrome)
- ✧ Calcium build-up in the rotator cuff tendons (calcific tendinitis)



Inflammation



Tear



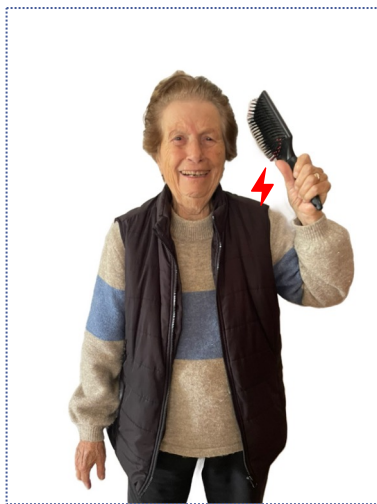
Impingement

What is Rotator Cuff Disease?

Rotator cuff disease is the most common cause of shoulder pain and disability.¹⁻³

It can cause distress, pain, weakness, decreased range of motion, difficulty sleeping and impairment in daily activities such as hanging the laundry, reaching a high cupboard or brushing hair. This further leads to more symptoms and impairments.¹⁻³

In some cases, rotator cuff disease shows no symptoms, which is highly common in older adults. If left untreated, it can lead to further injury, decreased function and range of motion. This significantly affects daily life and decreases independence.^{1,4}



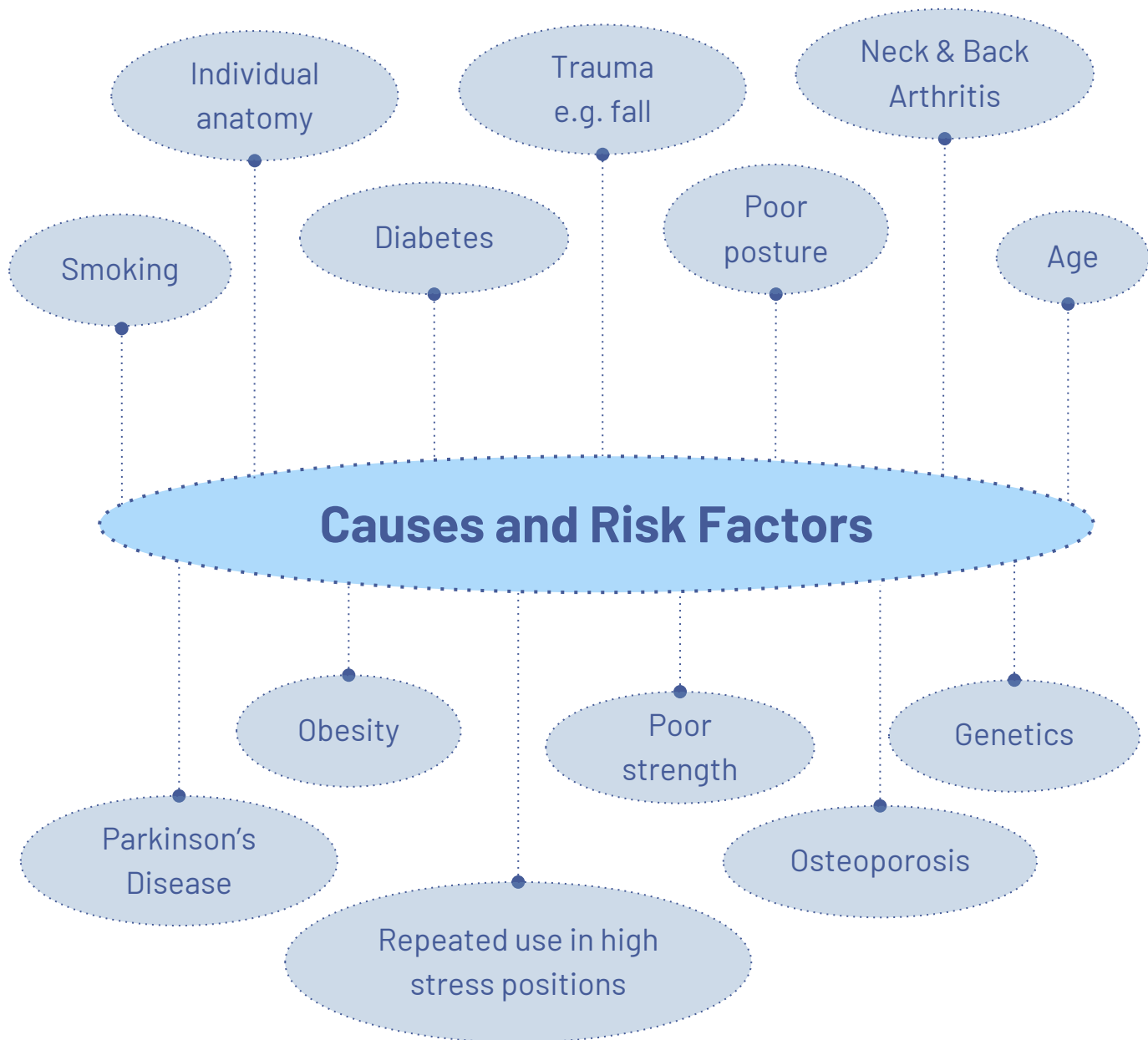
Brushing



Reaching

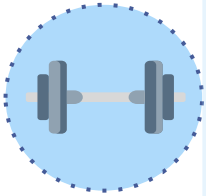
What Causes Rotator Cuff Disease?

Many factors contribute to rotator cuff disease.⁴⁻⁷



How is Rotator Cuff Disease Treated?

The main treatment for rotator cuff disease is non-surgical therapy.



Resistance exercise is the most effective for treatment and prevention. It helps in the short and long-term to:¹

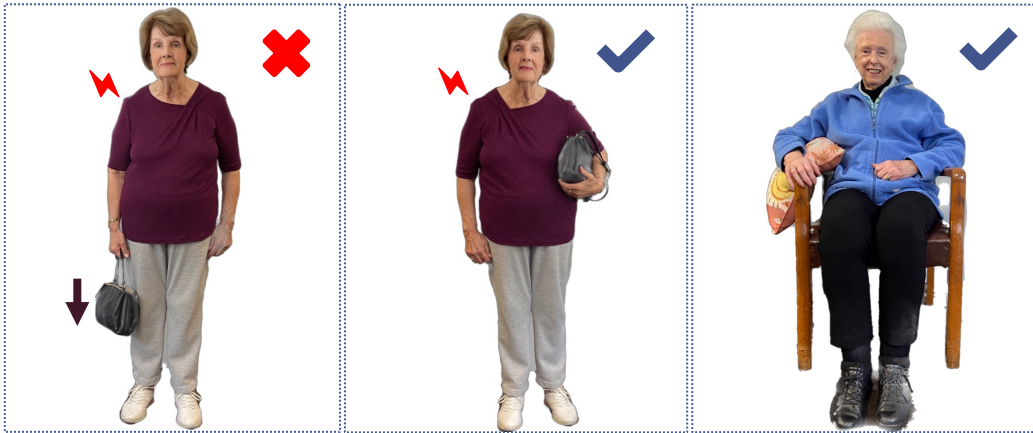
- * Improve posture, upper body strength and function
- * Promote healing
- * Prevent injury or reinjury
- * Correct imbalances to improve shoulder stability



Other non-surgical treatments include pain-relieving and anti-inflammatory medications, or cortisone injections to help reduce pain and inflammation.^{1,4}

If symptoms persist or hugely interfere with function despite undertaking exercise and medications, then surgery is considered.^{1,4}

Tips to Manage Shoulder Pain



To minimise worsening of impingement:

- ✧ Avoid holding a heavy bag or suitcase hanging straight down using the affected arm, instead, use the unaffected arm or affected arm with the elbow bent
- ✧ Avoid sitting with arms hanging down, instead, elevate the elbow on a pillow while sitting.



- ✧ Avoid sleeping on the painful shoulder
- ✧ Use a pillow under the elbow to elevate the arm to the level of the heart to prevent dragging down of the arm
- ✧ Use heating or anti-inflammatory rub on the painful area before going to bed.

Importance of Posture for the Rotator Cuff

Poor posture can affect the position of the shoulder joint.



A permanently hunched posture affects the length of the upper back. This alters the spaces between the shoulder joints and causes the shoulder blades to go out of optimal position.

Raised or forward-tilted shoulder blades change the structures and function of the rotator cuff muscles and ligaments. This can contribute to shoulder impingement, muscle tear and pain.⁸

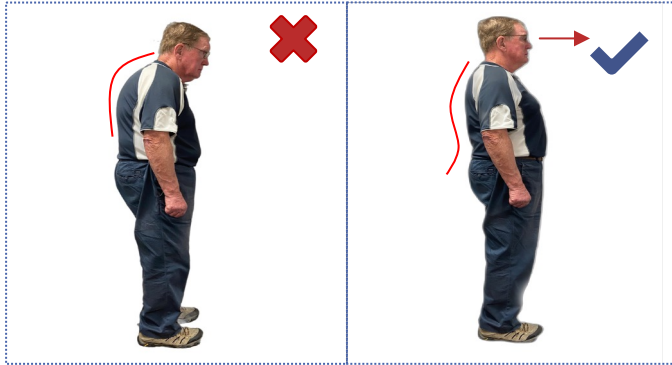
Tips for Good Posture

It is important to maintain good posture during everyday activities.

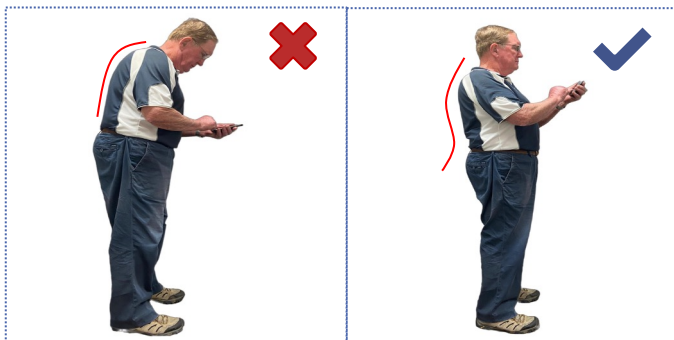


- ※ Prolonged sitting in a stooped position causes sustained shortening of the chest muscles and puts a strain on the back muscles, contributing to back and shoulder pain
- ※ To avoid this, slightly lift the feet off the floor and tuck them under you whenever possible while sitting; this encourages engagement of the core and hip flexor muscles, and enables upright sitting
- ※ If lifting both feet up is not possible, try keeping just one toe on the ground at a time, alternating feet when you feel fatigued
- ※ Adjust the height of the computer screen to eye level.

Tips for Good Posture



- * Stand tall
- * Roll the shoulders back
- * Chin straight



- * Raise the phone closer to the eye level



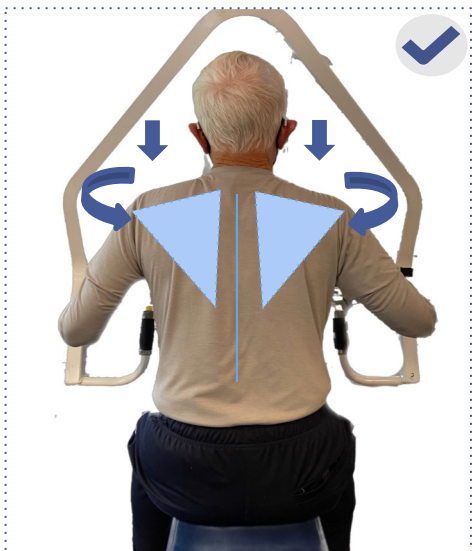
- * Look straight ahead
- * Straight head, neck and back

Tips for Good Posture

It is important to maintain good posture while exercising.



- * Pull the shoulders down, away from the ears
- * Squeeze shoulder blades towards the spine and down towards the waist
- * Practise doing this daily against a wall



The same technique applies during resistance training, such as performing rows on the machine

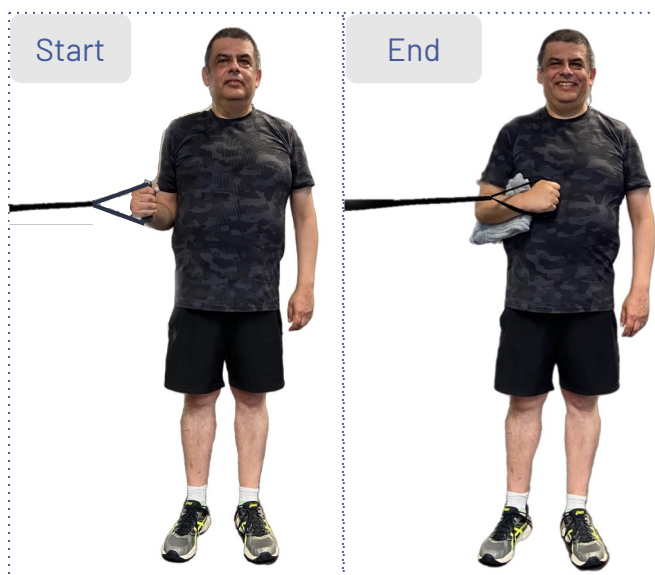
- * Pull shoulder blades downwards and towards the spine
- * Sit tall and look forward
- * Avoid arching of the back
- * Focus on slow and controlled movements

Rotator Cuff Exercises

Cable Rotations

- * Keep elbow close to the body. If you are unable to, use a small folded towel as shown below with a ▲.
- * Keep forearm parallel to the floor throughout the movement.

Shoulder Internal Rotation



Start with the forearm as far out as your shoulder allows without pain. Pull the cable towards the body and return slowly.

Shoulder External Rotation



Pull the cable away from the body as far as your shoulder allows without pain. Return to the original position slowly.

- ✓ Make sure there is tension on the cable before you pull
- ✓ Pull the shoulders down and squeeze the shoulder blades together throughout the exercises
- ✓ Repeat each exercise 12 times for both arms

Rotator Cuff Exercises

Y W T L

Pull the shoulders down and squeeze the shoulder blades together throughout all exercises.

Start with arms by the side, lift them **forward and upward** in one motion, and return to the original position. Repeat 12 times.



Bring the arms up as high as your shoulders allow without pain. Stop the movement just below the level where you feel any pain. Overtime, this range will increase with exercise.

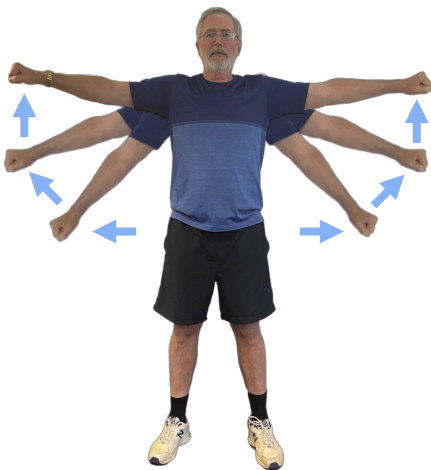
Start with arms in "W" position as high as your shoulders allow without pain. Pull them **downward and backward** and return to the original position. Repeat 12 times.



Rotator Cuff Exercises

Y W T L

Start with arms by the side, lift them **upward**, and return to the original position. Repeat 12 times.



Stop the movement just below the level where you feel any pain. It is safe to continue the exercise in the pain-free range. Overtime, this range will increase with exercise.

Start with bent elbows by the side of the body. Bring the **forearms out**, tucking the elbows in, and then return to the original position. Repeat 12 times.



Insert
folded
towel

Please contact **Professor Maria Fiatarone Singh AM, MD, FGSA, FRACP** and our friendly staff if you would like more information on exercise management for Rotator Cuff Disease or any other medical questions you may have.



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Designed for The Centre for STRONG Medicine

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