

Patient Information Sheet

ROTATOR CUFF STRAIN AND IMPINGEMENT

1. What is it?

It is an injury of the tendons under the deltoid muscle, often with a failed healing response (tendinopathy). Sometimes there is associated pinching of the tendons.

2. What causes it?

The tendons become swollen and then they are more likely to get pinched under the outer end of the collarbone.

3. Symptoms – what you notice

- a. Pain, especially when doing overhead work, e.g. putting things into high cupboards or serving at tennis.
- b. Weakness on trying to perform any activity which causes pain. If there is a lot of night pain or associated shoulder joint stiffness, you may be developing a frozen shoulder.

4. Signs – what the doctor finds

- a. Pain on lifting the arm out to the side.
- b. A relatively full range of shoulder movement (unless a frozen shoulder is developing).
- c. Positive impingement signs when the arm is put into certain positions which provoke shoulder pain.
- d. If there is a major loss of power of external rotation with the elbow by the side, then there may be an associated full thickness tear of the rotator cuff tendons.

5. Investigations

- a. X-rays may show associated spikes of bone that can cause impingement. If there is a full thickness tear of the rotator cuff, the arm bone (humerus) tends to ride up.
- b. Ultrasound scans show impingement. They also show rotator cuff tendon damage (tendinopathy) and any tear of the rotator cuff tendons.

6. Treatment

- a. Anti-inflammatory tablets can reduce the swelling of the tendon and therefore help settle the pain.
- b. Try to alter movement pattern to reduce the episodes of pain.
- c. Physiotherapy exercises help to build up the power of the external rotation and adductor muscles.
- d. Occasionally a cortisone injection into the space under the acromion bone can be very helpful. To get the full benefit from the injection, physiotherapy exercises should be continued to correct any muscle imbalance.
- e. Surgery is only required if there is a full thickness tear of the muscles, or an associated chip of bone has been pulled off (avulsion fracture), or there is a curved or hooked acromion that is pressing on the tendon.

7. Recovery time

Average recovery time is 2-6 weeks, but recurrences are common.

8. Recovery sequence

Step 1 Tablets to settle the pain, avoid provocative shoulder movements.

Step 2 Physiotherapy exercises to improve posture and correct any muscle imbalance.

Step 3 If there is still have significant pain with many daily activities three weeks after the injury, consider having a cortisone injection.

Step 4 As symptoms settle, build up the power and endurance of the shoulder muscles.

Step 5 Return to overhead activities.

Step 6 When all shoulder movements can be performed confidently it is safe to return to sport.

Step 7 Keep doing a maintenance exercise programme to keep the rotator cuff muscles strong.