

# Deltoid re-education: Rotator Cuff Deficiency or Massive Tear

## Stretching exercises for tight shoulder capsule

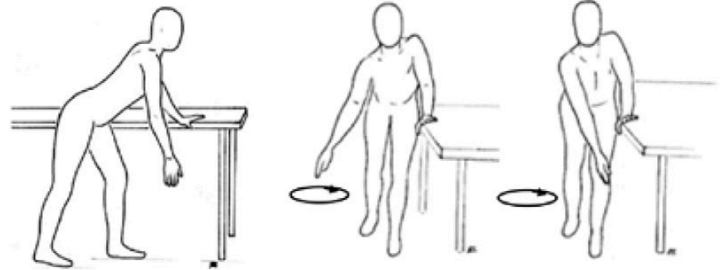
These exercises should be carried out 3 - 5 times daily until your review with your Consultant, which is usually 4-6 weeks following injection.

### Warm up exercise

#### 1) Pendular exercises:

Lean well forward using a table or worktop for support.

a) Let your arm hang down as relaxed as possible. Swing your arm in a small circle, clockwise then anticlockwise. Repeat x10 in each direction.



b) Swing your arm forwards and backwards in line with your body, parallel to your feet, not across the body. X 20.

The addition of a weight 0.5 – 1Kg. helps the quality and comfort of the movement. (Fill a plastic milk bottle with water 500ml or 1 litre.)

#### 2) Posterior stretch for tight posterior capsule:

##### a) The Sleeper Stretch

Lie on the affected side with your upper arm and your elbow both at 90°. With your other hand GENTLY push downwards on the back of the wrist as shown. Hold for 10 – 15 seconds. Relax back to start position, Pause and repeat exercise X 5 - 10 times.



##### b) Posterior stretch in standing:

Take your affected arm across your body to rest the

hand on the opposite shoulder. Grasp the elbow with your good hand, gently pushing the elbow back and keep pressure on as you pull the elbow and arm across your chest until you feel a stretch. Hold 10 - 15 seconds. Pause and

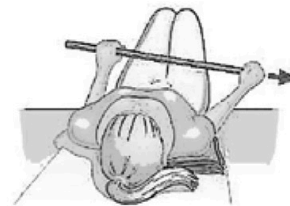


**3) Passive assisted elevation:**

Flexion Stretch in lying supine. Lying on your back, Grasp around your wrist or forearm, and raise the arm overhead as far as possible until you feel resistance. Hold 10 seconds. Then lower. Pause and repeat exercise X 5 - 10 times.

**4) External rotation stretch**

Lie down with a folded towel under your upper arm. Grasp the end of a walking stick in your affected hand as shown. Keeping the elbow tucked into your side, push the stick outwards away from the body, hence turning the upper arm. Stop at pain or resistance, and then hold for 10 - 15 seconds. Pause and repeat exercise X 5 - 10 times.

**5) 'Siesta' stretches Hands behind head stretch (when able to do exercise 3):**

Lying on your back, place your hands behind your head and gently stretch the elbows downwards towards the floor. You may push the elbow down with the other hand. Hold for 10 seconds and relax. Repeat 10 times.

**Another way:**

Interlock your fingers together on your chest, and lift both hands and place behind your head. Then drop your elbows outwards as shown. (You should feel a pull in the front of your shoulders.) Hold 10 - 15 seconds. Repeat exercise X 10 times.

**6) Towelling behind the back:**

Drop a small towel over your unaffected shoulder and grasp the end with your other hand. Gently pull your hand up your back. Hold for 10 seconds and relax. Repeat 10 times.

Avoid increased pain when stretching, but expect some discomfort.

The exercises should be repeated 3 - 5 times daily until your Consultant / Shoulder Fellow review, which is usually after 4 - 6 weeks.

If you experience an increase in pain while doing the exercises, reduce the number of repetitions and/or range of movement.

The above stretching exercises should ideally be taught to you by a physiotherapist, as not all may be suitable. Also manual therapy, shoulder management advice, and painless rotator cuff exercises, in addition to these exercises may be beneficial. The exercises are often prescribed following injection into the bursa, but 1:1 with a physiotherapist is even better.



# Anterior Deltoid Exercises

## Advice for Patients with Massive Rotator Cuff Tears

As a result of prolonged overuse and wear and tear, the muscles arising from the shoulder blade and attaching to the top of your humerus (arm bone) – the rotator cuff muscles - have become torn. This means you are no longer able to easily lift your arm above 90 degrees.

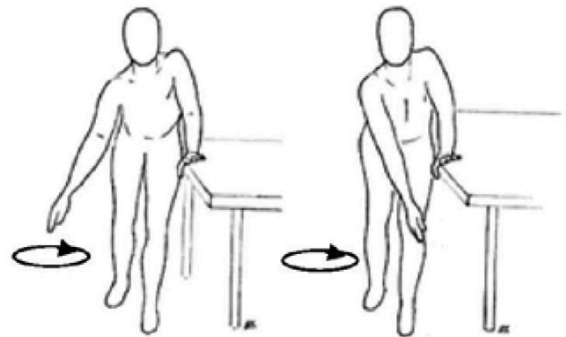
However there is another powerful muscle on the outside of your arm – the deltoid muscle – that may be re-educated to compensate for the torn rotator cuff.

The following exercises should be done three to five times a day to strengthen your deltoid muscle. It will reduce your pain and improve both the range of movement and your arm function.

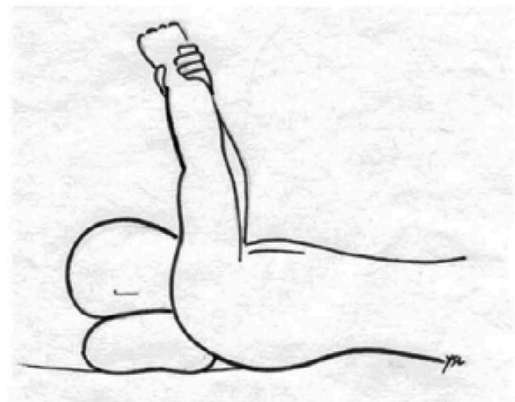
These exercises must be done for at least 12 weeks and must always be performed starting lying down to begin with. You will be taught the exercise at the unit and reviewed at 6 and 12 weeks.

### Exercises:

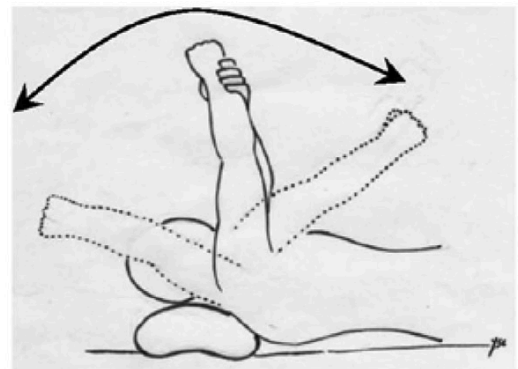
1. While standing, bend forward and let your arm dangle free and perform gentle pendulum movement for about 5 minutes. This will help you in relieving pain and free up your muscles around the shoulder.



2. Lie down flat on your back, with a pillow supporting your head.
3. Raise your weak arm to 90 degrees vertical, using the stronger arm to assist if necessary. The elbow should be straight and in line with your ear.
4. Hold your arm in this upright position with its own strength.



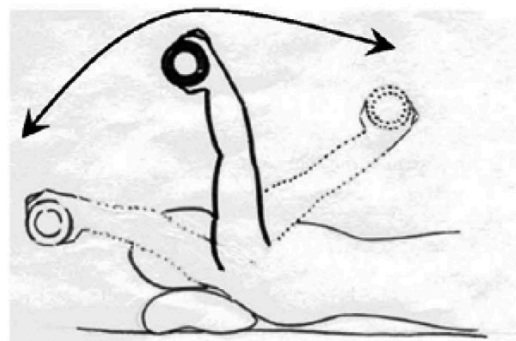
5. Slowly with your fingers, wrist and elbow straight move the arm forwards and backwards in line with the outside of the leg, as per diagram (gentle movement from both sides of the arm upright position.) Keep the movement smooth and continuous for 5 minutes or until fatigue.



6. As you get more confidence in controlling your shoulder movement, gradually increase the amplitude of movement until your arm will move from the side of your thigh to above your head, touching the bed, and return.

Keep the movement smooth and continuous for 5 minutes or until fatigue.

7. As you get more confidence in controlling your shoulder movement, a lightweight e.g. a tin of beans or small paperweight, should be held in the affected hand.



Repeat as above (5 and 6).

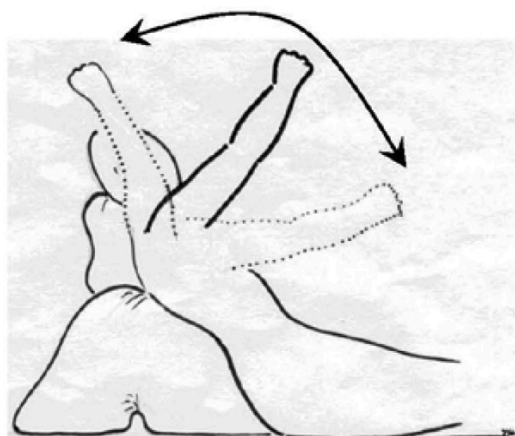
8. Having more confidence in controlling your shoulder movement gradually go from lying down to sitting and eventually standing.

At this stage you may recline the head of your bed or put some pillows underneath your back to recline your position.

Repeat the same exercise again, this time against some gravity.

Start again from holding your arm in the upright position with its own strength.

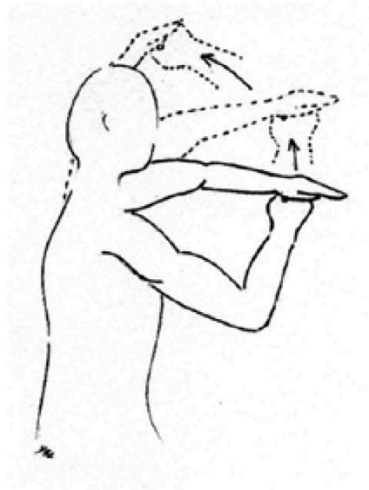
Repeat as above (5, 6, and 7).



Start first without any weights and progress to use the same lightweight you used before in the lying down position.

9. Another useful exercise for re-education of concentric contracture of the deltoid muscle.

Performing the exercise:



Make a fist with the hand of the affected side. The flat hand of the opposite side is providing resistance. Push your affected side hand against resistance from the other hand. While doing this, you will notice that you can fully elevate your arm (above your head).

Repeat these exercises in order to 'learn' and re-educate your Deltoid muscle to perform this 'concentric contracture' even without pushing against your other arm.

You should repeat these exercises X 10 in a session, 3 to 5 sessions per day.

10. Stop exercising if your pain increases or you feel unwell.
11. We will review you at the Reading Shoulder Unit at 6 and 12 weeks. We expect to see some improvement by that time.



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