

Anterior Deltoid Strengthening Exercises

Hannan Mullett Consultant Orthopaedic Surgeon

The rotator cuff muscles are a group of muscles that originate from your shoulder blade and insert into the top of your humerus. These muscles are responsible for controlling the movement of your arm into elevation. If there is a large tear of these tendons, it can be difficult to lift your arm away from the body. Fortunately, there is another large muscle called the Deltoid which can be re-educated to compensate for the torn rotator cuff.

The following exercises should be done three times a day and it may take up to 3 months to feel the benefits of the exercises. The exercises start lying down flat to reduce the work against gravity and will be progressed as the strength improves. This progression will be guided by your chartered physiotherapist.

Perform these exercises 10 times, 3-5 times a day. Stop exercising if your shoulder pain increases.

You should expect to see some improvement by 6 to 12 weeks.

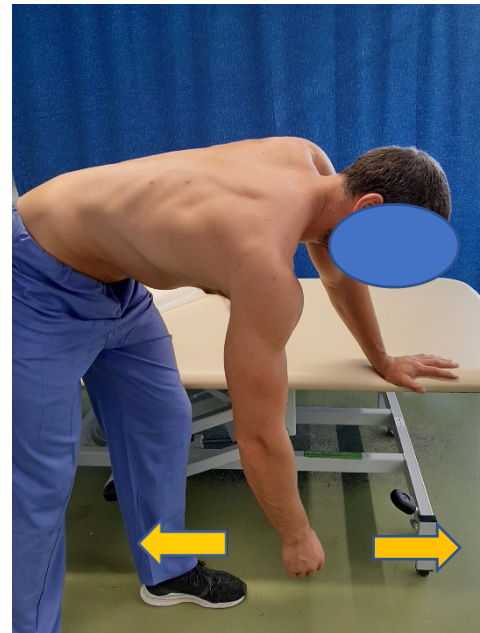
Pendular Exercises

The pendular exercises can be done as a warm up.

- Bend over supporting yourself with the good arm
- Start moving your affected arm in a circle 10 times
- Then move your arm backwards and forwards 10 times
- Next move your affected arm side to side 10 times

This exercise was adapted by Clare Gilsenan & colleagues , Chartered physiotherapist SSC & Beaumont Hospital ,based on program described in -The role of anterior deltoid reeducation in patients with massive irreparable degenerative rotator cuff tears.

O.Levy,H.Mullett,S.Roberts,S.Copeland J Shoulder Elbow Surg , 17 (2008), pp. 863-87)



Stage 1

Lie down flat on your back, with a pillow supporting your head. Support the elbow of the affected arm on a rolled towel. Bend the elbow of the affected arm. Now raise our arm to 90 degrees vertical, using the stronger arm to assist if necessary. Once you have got to 90 degrees, you can straighten your elbow. Now attempt to hold your arm in this upright position with its own strength.



Stage 2

Slowly, with your fingers, wrist and elbow straight move the arm in small circular movements clockwise and counter clockwise. Gradually increase the circle as tolerated.

This exercise was adapted by Clare Gilsenan & colleagues , Chartered physiotherapist SSC & Beaumont Hospital ,based on program described in -The role of anterior deltoid reeducation in patients with massive irreparable degenerative rotator cuff tears.

O.Levy,H.Mullett,S.Roberts,S.Copeland J Shoulder Elbow Surg , 17 (2008), pp. 863-87)



With your fingers, wrist and elbow straight, move the arm forwards and backwards in line with the outside leg. Start with a small arc of motion. Keep the movement smooth and continuous for 5 minutes or until fatigue.

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

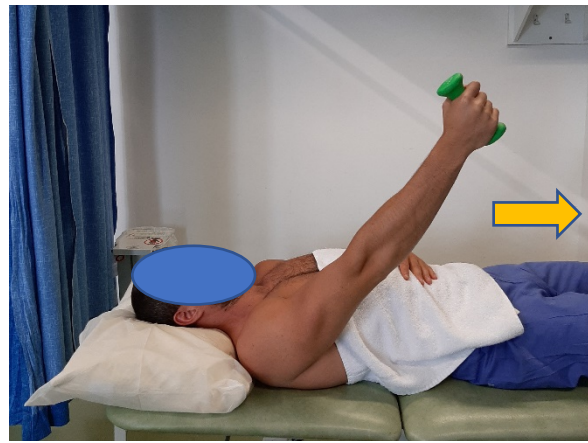
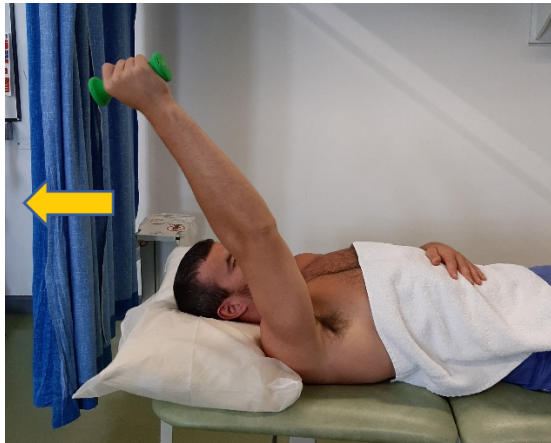


Stage 3 - Progress to light weight

This exercise was adapted by Clare Gilsenan & colleagues , Chartered physiotherapist SSC & Beaumont Hospital ,based on program described in -The role of anterior deltoid reeducation in patients with massive irreparable degenerative rotator cuff tears.

O.Levy,H.Mullett,S.Roberts,S.Copeland J Shoulder Elbow Surg , 17 (2008), pp. 863-87)

As you get more confident in controlling your shoulder movement, a light weight e.g. small paperweight, should be held in the affected hand and you repeat the movement outlined above. Once you can control the movement lying flat with a weight in your hand you can move onto stage 4.



Stage 4 - Progress to an inclined position

This exercise is performed sitting up in an inclined position, using a recliner chair, deck chair or simply put some pillows underneath your back to recline your position.

Repeat the exercise again, starting first without any weights and progress to use the same light weight you used before in the lying flat position.

This exercise was adapted by Clare Gilsenan & colleagues, Chartered physiotherapist SSC & Beaumont Hospital, based on program described in -The role of anterior deltoid reeducation in patients with massive irreparable degenerative rotator cuff tears.

O.Levy, H.Mullett, S.Roberts, S.Copeland J Shoulder Elbow Surg, 17 (2008), pp. 863-87)



Notes:

This exercise was adapted by Clare Gilsonan & colleagues , Chartered physiotherapist SSC & Beaumont Hospital ,based on program described in -The role of anterior deltoid reeducation in patients with massive irreparable degenerative rotator cuff tears.
O.Levy,H.Mullett,S.Roberts,S.Copeland J Shoulder Elbow Surg , 17 (2008), pp. 863-87)