

Shoulder care following spinal injury

Physiotherapy



Information for patients

Therapy Services - Neurosciences



PROUD TO MAKE A DIFFERENCE

SHEFFIELD TEACHING HOSPITALS NHS FOUNDATION TRUST



Exercise and stretching are important for helping to keep joint movement and strength and to allow you to move more easily.

Why is it important to do these exercises?

Following spinal cord injury, your arms will have to work harder, for example pushing your wheelchair and transfers. We therefore recommend daily stretches and shoulder strengthening to help maintain healthy joints.

These exercises aim to improve / maintain the following:

- Range of movement
- Strength
- Posture
- Function
- Transfers

The key goal of these exercises is for the long-term protection of your shoulders, in order to maintain your level of function for as long as possible.

What is the rotator cuff and why is it important?

The rotator cuff is a group of 4 muscles that surround the shoulder joint. They provide stability to the joint but frequently become weak if not used, or other big muscle groups (e.g. pectorals) take over their role.

If the rotator cuff is weak your shoulder is more at risk of developing pain and problems with tendons.

How long will it take me to do these exercises?

Not long! The exercises detailed in this booklet may take around 10 to 15 minutes to complete.

Each exercise will suggest an amount of time for stretching or a number of repetitions. They can be fitted into your daily routine to suit you.

These exercises can be completed as well as any other exercises your physiotherapist has suggested.

How often should I complete these exercises?

We recommend these exercises be completed once a day.

Are there any risks in completing these exercises?

There are 2 exercises involving the use of a thera-band (a thin ribbon of stretchy material supplied by your physiotherapist). It is essential to ensure a firm grasp and a secure fitting to prevent the band from slipping.

For more information please refer to the "Use of a Thera-band" information booklet which we will provide.

Mild to moderate discomfort is expected when completing strengthening exercises. If you do experience discomfort it should ease within 30 minutes after finishing the exercises. If this pain continues longer, or you suffer severe pain, we recommend you stop the exercises and talk to your physiotherapist before continuing

Stretches

Pectoral stretch

As pictured below, position yourself in a doorway and place one forearm on the door frame. Slowly turn your wheelchair away from the side you are stretching. For an extra stretch you can raise your hand higher.



- Hold for 15 seconds. Repeat twice on each side.

Note: Your entire forearm should always be in contact with the doorframe during the stretch.

Biceps stretch

Position your chair in a doorway. Place your hand on the door frame just above wrist level with your arm at a 45° angle. Slowly turn your wheelchair away.

- Hold for 15 seconds.
Repeat twice on each side.

Note: it is important to keep your shoulder blades back and down during the stretch.



Latissimus dorsi (back) stretch

In your wheelchair, facing a table or work surface, place both hands on the table. Slowly push away so the wheelchair rolls back – see pictures.



- Hold for 15 seconds. Repeat twice.

Note: to add an extra stretch, turn your wrists so your thumbs point upwards.

Trunk rotation stretch

With your wheelchair in a stable position, brakes on and bottom back in the seat, twist your body as far as you feel comfortable.

- Hold for 15 seconds.
Repeat twice to each side.

Note: it is key to start in a good upright position to allow a smooth twist movement.



Rotator cuff strengthening

Prescribed thera-band colour: _____

External rotation (neutral)

Start in an upright seated position. Grasp the thera-band as firmly as you can in both hands, keeping your elbows tucked in at your sides. A towel kept between your arm and the side of your body can help keep this position.

Rotate both hands away from your body and then slowly return to the starting position.



- Repeat to the point of fatigue (i.e. you can't do any more), have a 3 minute rest. Repeat this a further 2 times, once a day.

External rotation (90°)

Whilst sitting in a chair, raise one arm up to 90 degrees with your forearm pointing forward, grasping a dumbbell firmly, as shown below.

Raise the dumbbell towards the ceiling whilst keeping your shoulder and elbow at a 90 degree angle. Slowly lower the dumbbell back to the starting position.



- Repeat to the point where you feel you cannot do any more, have a 3 minute rest. Repeat this a further 2 times, once a day.

Note: The key when using a dumbbell is to make sure you lower the dumbbell very slowly during these exercises.

Useful links

Spinal Injuries Association (SIA): <https://www.spinal.co.uk/>

SIA videos demonstrating shoulder exercise completion:

<https://www.spinal.co.uk/learn/upper-limb-exercises-for-the-shoulder/>

SIA factsheet on aging well and shoulder pain:

https://www.spinal.co.uk/resources_category/ageing-well/#resources--title

If you have any questions or concerns please contact us on:

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