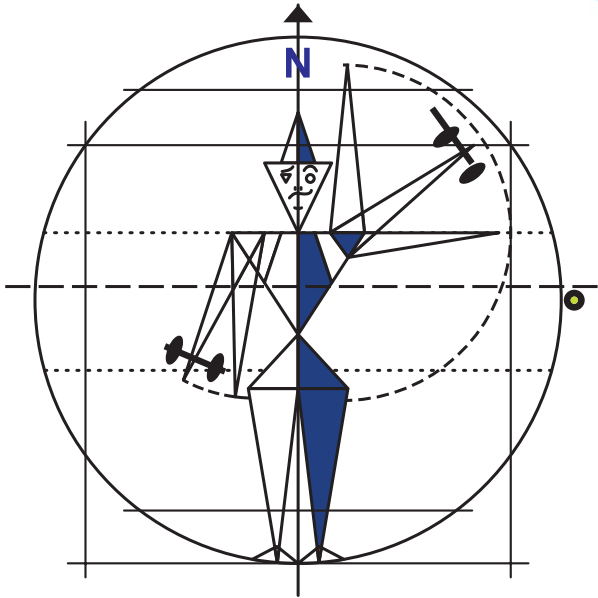




INFORMATION DEVELOPED WITH PATIENTS FOR PATIENTS

Sub-acromial decompression

ABOUT YOUR OPERATION AND
WHAT TO EXPECT AFTERWARDS AT HOME



This information booklet can also be viewed in video graphic and voice format at www.ndorms.ox.ac.uk/tepi

It has been produced to help you understand your operation and to gain the maximum benefit from your operation. It is not a substitute for professional medical care and should be used in association with advice and treatment provided by your treating hospital. Individual variations requiring specific instructions not mentioned here may be required.

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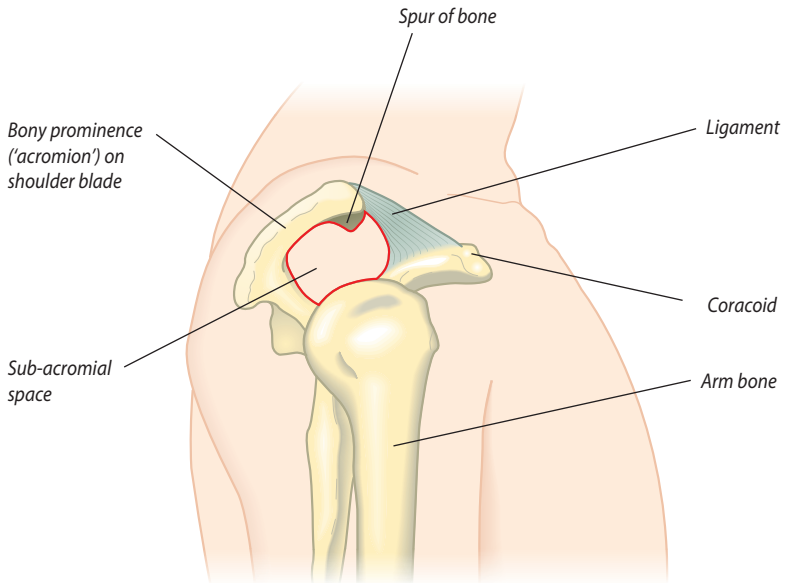
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About your shoulder

The shoulder is a ball and socket joint with a bony roof above that forms part of an arch. The roof is called the acromion and is part of your shoulder blade.

The shoulder joint is surrounded by a deep layer of tendons (the rotator cuff) which pass under the roof. One of these tendons (supraspinatus) commonly becomes worn and painful. It may swell and rub on the bone above. The bone often responds to the rubbing by forming a bigger spur. See diagram below.

Right shoulder – viewed from the side

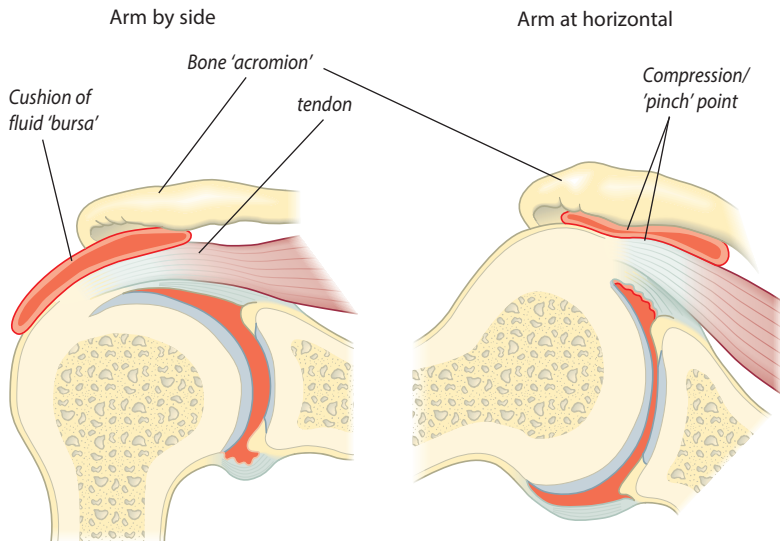


Certain movements of the arm, especially lifting it to the side reduces the space under the roof. The tendon then rubs against the roof and inflames a cushion of fluid called 'the bursa'.

(See diagram below.) The rubbing causes further swelling of the tendon and bursa on the acromion bone. This is a vicious circle.

If the cycle of rubbing and swelling is not broken by time, rest, physiotherapy and a cortisone injection, then surgery may be necessary

Sub-acromial impingement – right shoulder



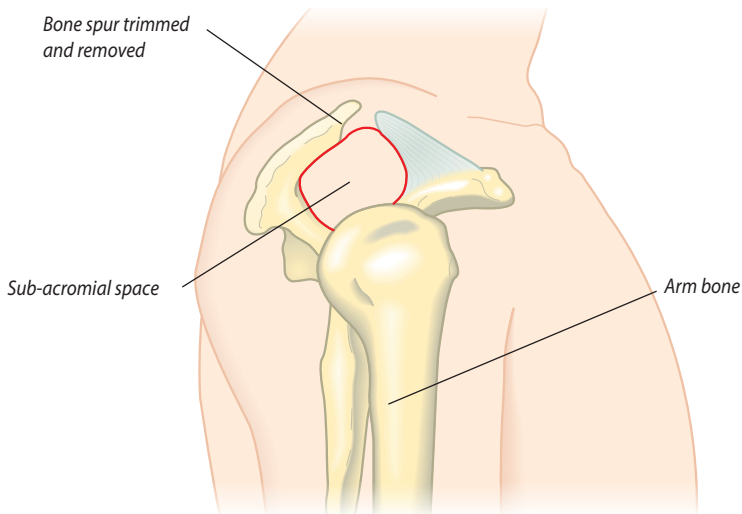
About the sub-acromial decompression

This surgery is usually done under a general anaesthetic but you are also offered a “nerve block” to block the nerves that sense pain from your shoulder.

A nerve block involves injecting local anaesthetic under the skin on the side of your neck under ultrasound guidance, normally whilst you are sedated (half-asleep) just before you are put to sleep for the operation.

The sub-acromial decompression is then done by keyhole surgery (arthroscopy). This involves shaving the spur of bone from the undersurface of the acromion bone. (See diagram below.) This allows the tendon to move more freely and break the cycle of rubbing and swelling.

Right shoulder viewed from the side – decompression



What are the risks of surgery?

All operations involve an element of risk even keyhole surgery. Risks you should be aware of before and after your operation include:

- a) Persistent ongoing pain and/or stiffness in/around the shoulder.
5 to 20 people in every 100 (5-20%) will still have some pain after the operation or develop a frozen shoulder (stiff shoulder).
- b) infection. These are usually only superficial wound problems.
Occasionally deep infection may occur after the operation and although serious this is rare (less than 1 in 100 people).

- c) A need to re-do the surgery is also rare. Usually less than 5 in 100 people need further surgery over a 10 year period.
- d) Damage to the nerves and blood vessels around the shoulder is very rare (less than 1 in 100 people).
- e) Deep vein thrombosis (DVT) or embolism is also very rare after upper limb shoulder surgery like this (less than 1 in 100 people).
- f) The chance of any complications from the anaesthetic is low for most people. Your anaesthetist will discuss these with you.

Information about the nerve block

As with most procedures there are a few common side effects to be aware of. The effects below are temporary and not a cause for concern. They will wear off when the local anaesthetic wears off in 12 - 48 hours.

- a) Your arm will be very numb. You may not be able to move it and your fingers may have "pins and needles".
- b) You must take care of your arm whilst it is numb as you could injure it without being able to feel it. You should keep the arm in the sling until the block has fully worn off. Keep your arm away from heat and cold.
- c) The local anaesthetic can also spread to other nearby nerves. Sometimes this causes other areas to be numb such as your cheek, neck and ear.
- d) For similar reasons you may have a blocked nose and a droopy eyelid on the side of the operation. Your eye and cheek may appear a little red, and you may have a hoarse voice or feel slightly breathless.

If any of the side effects described above last more than a 48 hours you should contact the hospital for advice.

Are there any risks from a nerve block?

There is an extremely small risk that some of the side effects mentioned above become long-lasting, but by doing these blocks before your anaesthetic with careful monitoring we can reduce these risks even further.

There are some more significant complications such as difficulty breathing (from damage to the lung), long-standing or permanent nerve damage or a delay in waking immediately after surgery (due to spread of local anaesthetic towards the spinal cord). Thankfully these complications are very rare (less than 1 in 5000 procedures) and balanced by the marked reduction in your pain immediately after the operation.

Information for after you operation

Will it be painful?

When you wake up after your operation, the nerve block will make your arm feel numb and weak for 12-48 hours. The nerve block is likely to significantly reduce or completely remove your pain helping you get over the worst of the pain from the operation. The blocks are normally very effective and last into the next day. Your arm will then start to return to normal sensation.

It is best to take painkillers regularly, starting them before going to bed on the day of the operation and continuing for at least 2-3 days, even if you are comfortable, as the pain can sometimes return suddenly. Remember that painkilling tablets can take up to an hour to work.

On page 13 you will find information from the anaesthetic team explaining in detail the pain killers you should take and how and when you should take them.

Remember although this operation is technically straight forward and you will only have small scars, this procedure can be painful for several weeks, sometimes longer. Please be aware however that pain does NOT mean you are damaging the surgery that has been done.

Do I need to wear a sling and how do I manage with one good arm?

The sling is for comfort only. You can take it on and off as you wish once the nerve block has worn off. Normally it is discarded after a few days.

You may find it helpful to wear the sling at night for the first few nights, particularly if you tend to lie on your side. Alternatively you can



rest your arm on pillows placed in front of you. If you are lying on your back to sleep you may find placing a thin pillow or small rolled towel under your upper arm will be comfortable. Dressing, showering, taking a bath and cooking can be difficult initially, so if you live alone it would be helpful to have someone to help you for the first few days.

What do I do about the wound?

Usually you will not have any stitches, only small sticking plaster strips over two small wounds. Keep the wounds dry until they are healed, which is normally within 5–7 days. The dressings and any stitches are usually removed after 10 days by the nurse at your G.P. surgery. You will need to make an appointment at the surgery to have this done. You can wash or shower and use ice packs, but protect the wounds with cling film. Avoid using spray deodorant, lotions or perfumes near or on the wounds until they are well healed.

Do I need to do exercises?

Yes! There are some simple exercises shown in this booklet and on the [TEPI website \(www.ndorms.ox.ac.uk/tepi\)](http://www.ndorms.ox.ac.uk/tepi). They aim to stop your shoulder getting stiff and to strengthen the muscles. Start the exercises when the nerve block has worn off and normal sensation has returned. It is common for pain to be present immediately after surgery and for some weeks. Use pain medication to control the pain and do not be frightened to move your shoulder. Initially the best exercise will be using the arm for normal, gentle arm activities. You cannot damage the surgery that has been done but overall let the pain settle before over-challenging the shoulder. You can increase activities and exercises if you are comfortable – but you will be given individual specific exercises when you attend for your follow up clinic appointment.

When do I return to the outpatient clinic and who will I see there ?

This is normally arranged for approximately 4-6 weeks after your operation to check on your progress. Please discuss any queries or worries you may have with the specialist or senior physiotherapist in clinic. You may only be seen by a physiotherapist to progress appropriate exercises and to assess whether a course of physiotherapy is needed. You may not see the consultant if you are progressing as expected. Further clinic appointments are made after this as necessary.

Are there things that I should avoid?

- a) There are no restrictions (other than the pain) to movement in any direction. Do not be frightened to start moving the arm as much as you can. You cannot damage the surgery that has been done. Gradually the movements will become less painful.
- b) Avoid heavy lifting for 1 week to 3 weeks.
- c) Be aware that activities at or above shoulder height stress the area that has been operated on. Do not do these activities unnecessarily. Try and keep your arm out of positions which increase the pain.

How am I likely to progress?

This can vary considerably and for some it is not a quick fix operation. The overall results are good but do not be disappointed if some pain is still a feature for several weeks following surgery. The discomfort from the operation will gradually lessen over the first 6 weeks. You should be able to move your arm comfortably below shoulder height by 2–4 weeks and above shoulder height by 6 weeks. For some patients it can take longer and physiotherapy treatments are often needed in these people.

Normally the operation is done to relieve pain from your shoulder and this usually happens within 6 months (for 90% of people). However, there may be improvements for up to 1 year.

When can I return to work?

This will depend on the type of work you do and the extent of the surgery. If you have a job involving arm movements close to your body you may be able to return within a week. Most people return within a month of the operation but if you have a heavy lifting job or one with sustained overhead arm movements you may require at least 6 weeks or sometimes longer. Please discuss this further with the doctors or physiotherapist if you feel unsure.

When can I participate in my leisure activities?

Your ability to start these activities will be dependent on the pain, movement and strength that you have in your shoulder. Nothing is forbidden, but it is best to start with short sessions involving little effort and then gradually increase the effort or time for the activity. However, be aware that sustained or powerful overhead movements (e.g. trimming a hedge, some DIY, racket sports etc.) will put stress on the sub-acromial area and may take longer to become comfortable (12 weeks).

When can I drive?

You can drive as soon as you have regained sufficient pain free movement in your shoulder and you feel able and safe to steer and control your vehicle. This normally is after a week. Check you can manage safely and it is advisable to start with short journeys.

Pain relief after the operation.

As with most operations, it is normal to have some pain after shoulder surgery. You will be given painkilling tablets to help reduce this and most patients find the "nerve block" very helpful.

We strongly advise you to take the painkillers before going to bed on the day of your operation, in case the nerve block wears off earlier than expected. Continue to take the painkillers regularly, at the dose prescribed, for the first few days after surgery. This tends to work better than waiting until the shoulder is painful before taking pain relief because tablets normally take about one hour to reach their full effect.

You should be given two or three different types of painkilling tablets to take home. The different drugs reduce pain in different ways, so it is best to take them as a combination of drugs rather than a single drug on its own.

After two or three days you should try to cut down the number of painkillers you are taking to see if you still need them.

What painkilling tablets will I be given?

This depends both on your operation and any side effects you may be susceptible to.

Paracetamol

This is an effective painkiller particularly when taken regularly. It has a reputation for being weak but you should not forget it as it helps reduce the amount of other drugs you need. It has very few side effects.

Codeine (codeine phosphate)

This painkiller is moderately strong when taken at the same time as Paracetamol. It causes sleepiness, mild nausea and constipation in some people. You may wish to increase fruit and fibre in your diet or take a laxative whilst you are on codeine.

Co-codamol

This is a mixture of Paracetamol and Codeine Phosphate. You should not take additional Paracetamol or Codeine while you are taking Co-codamol. If the side-effects of the Codeine affect you (see above), you should stop taking the Co-codamol and take Paracetamol instead.

Diclofenac/Ibuprofen

These aspirin-like drugs are very effective painkillers. They can make indigestion worse however, and you should not take them if you have had a stomach ulcer in the past. Some people with severe asthma may also have been advised to avoid them but they rarely cause breathing problems.

Morphine/Sevredol/Oxycodone

These opiate tablets are the strongest you can use outside hospitals and are very effective painkillers. They can make people drowsy, nauseous or constipated. If you find these side effects troublesome you may want to stop them or reduce the dose. For most patients these are the painkillers to stop first after your operation.

In summary please remember:

- We recommend that you take painkillers regularly for the first few days after your operation as the pain can sometimes return unexpectedly after surgery.
- Your nerve block is likely to make your arm “numb” and “dead” for the night after surgery. Although a strange experience, is it normal and resolves 12-48 hours after surgery.

Exercises

Use pain-killers and/or ice packs to reduce the pain before you exercise, if necessary.

Do short, frequent sessions (e.g. 5–10 minutes, 4 times a day) rather than one long session.

It is normal for you to feel aching, discomfort or stretching sensations when doing these exercises. However intense and lasting pain (e.g. more than 30 minutes) is an indication to change the exercise by doing it less forcefully or less often. Pain does not mean damage is occurring.

An exercise programme, Set 1 is shown on the next pages.

If you prefer you can go to the TEPI website at www.ndorms.ox.ac.uk/tepi where there are video examples of these Set 1 exercises and also set 2 exercises for those progressing well. You can continue with these until you see the physiotherapist usually at your review appointment at around 4-6 weeks.

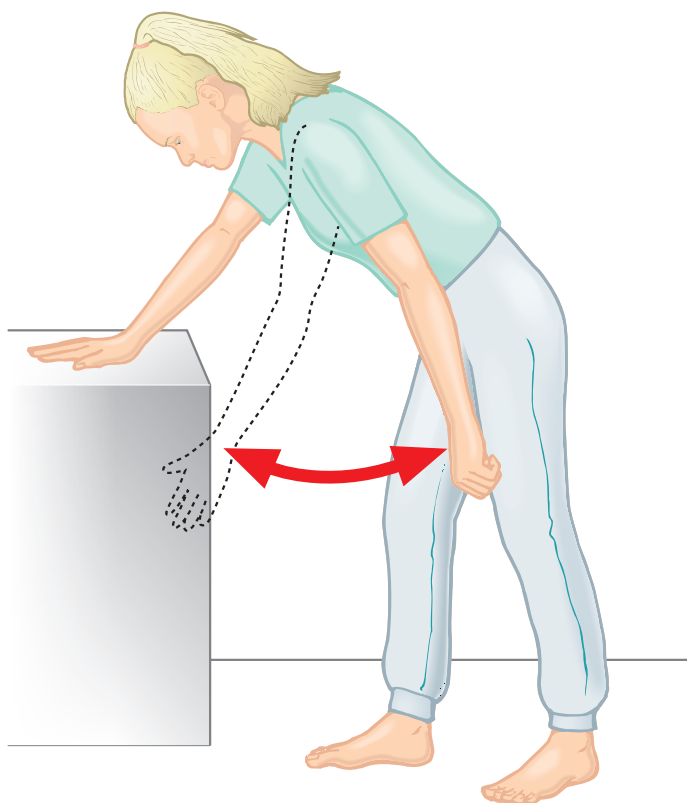
Exercises

N.B. Pictures are shown for the right shoulder unless specified. Good luck!

1. Pendulum *shown for left arm

Lean forwards

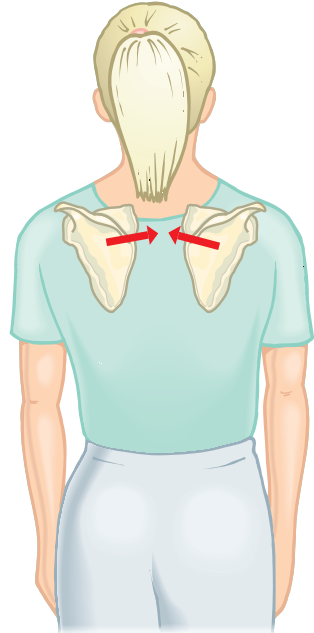
- Let your arm hang freely.
- Start with small movements.
- Swing your arm:
 - forwards and backwards.
 - in circles.
- Repeat 5 times each movement



2. Lower trapezius (Shoulder Squeezes and Posture)

Sitting or standing

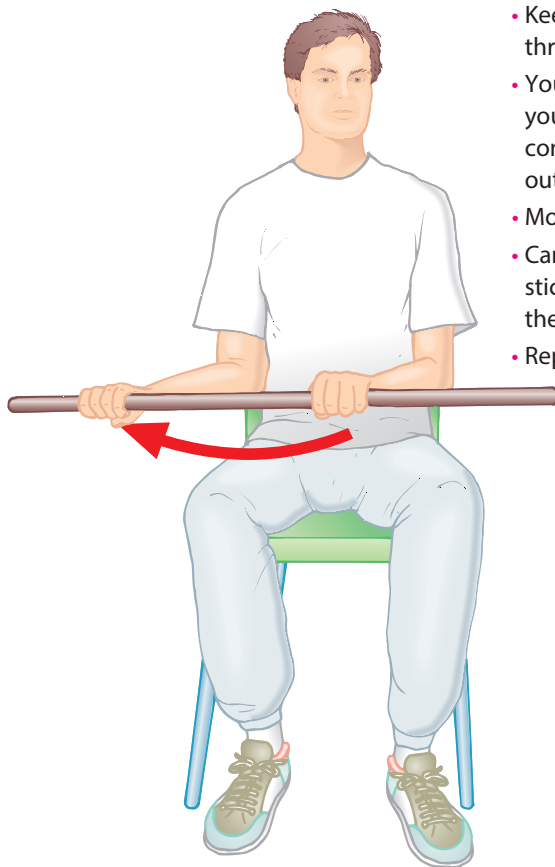
- Keep your arms relaxed.
- Square your shoulder blades by pull them back and slightly up (a feeling of pulling them back and your chest bone lifting)
- Do not let your back arch.



- Do not let elbows move backwards (clasp your hands in front of you, to discourage this!).
- Hold for 10 seconds.
- Repeat 10 times, "little and often" during the day.

3. External rotation (Outward rotation of the arm)

Sitting Upright

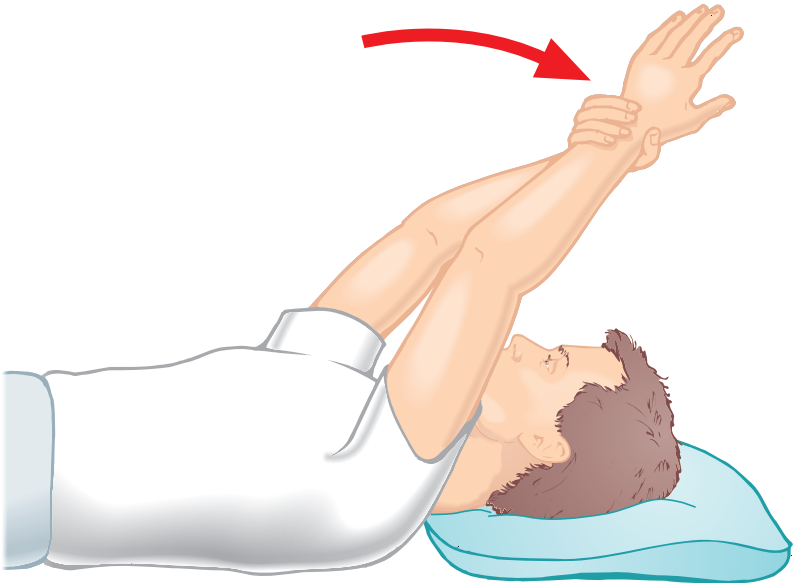


- Keep elbow into your side throughout.
- You can put a towel inbetween your elbow and chest if its more comfortable (but don't let it fall out during the exercise)
- Move hand outwards.
- Can support/add pressure with a stick held between your hands if the movement is stiff.
- Repeat 5–10 times.

4. Flexion in lying *left shoulder shown

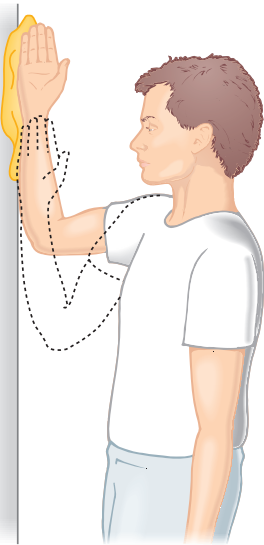
Lying on your back on bed/floor.

- Support your operated arm and lift up overhead.
- Try to get arm back towards pillow/bed.
- Gradually remove the support.
- Repeat 5–10 times.



5. Flexion in standing

Standing facing a wall

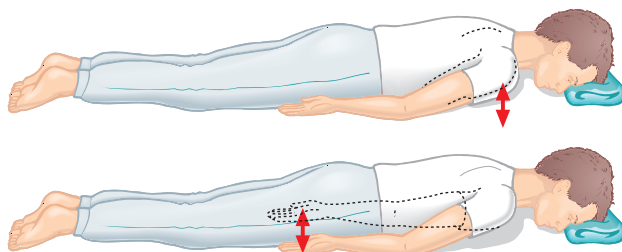


- With elbow bent and hand resting against wall. Slide your hand up the wall, aiming to get a full stretch.
- If necessary, use a paper towel between your hand and the wall to make it easier.
- Repeat 10 times.

6. Shoulder blade exercise

Lying face down, with head in front on a towel or turned towards shoulder

- Keep arm relaxed by side.
- Lift shoulder straight up in air. Try and keep a gap approximately 5cms between front of shoulder and bed.
- Hold shoulder up 30 seconds. Repeat 4 times.
- Progress – by lifting the arm up and down (elbow straight) but keeping the shoulder blade up all the time.
- Aim to do this movement for 30 seconds.
- Repeat 4 times.



Who to contact if you are worried or require further information?

If you have an appointment query, contact the appointments administrator at your hospital or your consultant's secretary.

If your wound changes in appearance, weeps fluid or pus or you feel unwell with a high temperature, contact your GP promptly.

If you have a query about exercises or movements, contact the Physiotherapy department where you are having treatment.