

INFORMATION ABOUT YOUR OPERATION

Elbow Replacement



This booklet has been produced to help you to gain the maximum benefit from your operation. It is not a substitute for professional medical care and should be used in association with treatment at Derriford Hospital. Individual variations requiring specific instructions not mentioned may be required.

It contains important information regarding your care after the operation and should be presented to any healthcare professional attending you after your surgery.

March 2007

This booklet was compiled by:
Jane Moser (Superintendent Physiotherapist)
Professor Andrew Carr (Consultant Orthopaedic Surgeon)

This booklet was modified, with permission, for use at PHNT by:
Mr Mark Brinsden (Consultant Orthopaedic Surgeon)

Cover illustration: Angela Walters
Help and feedback was given from patients who have had elbow replacement surgery.

Contents

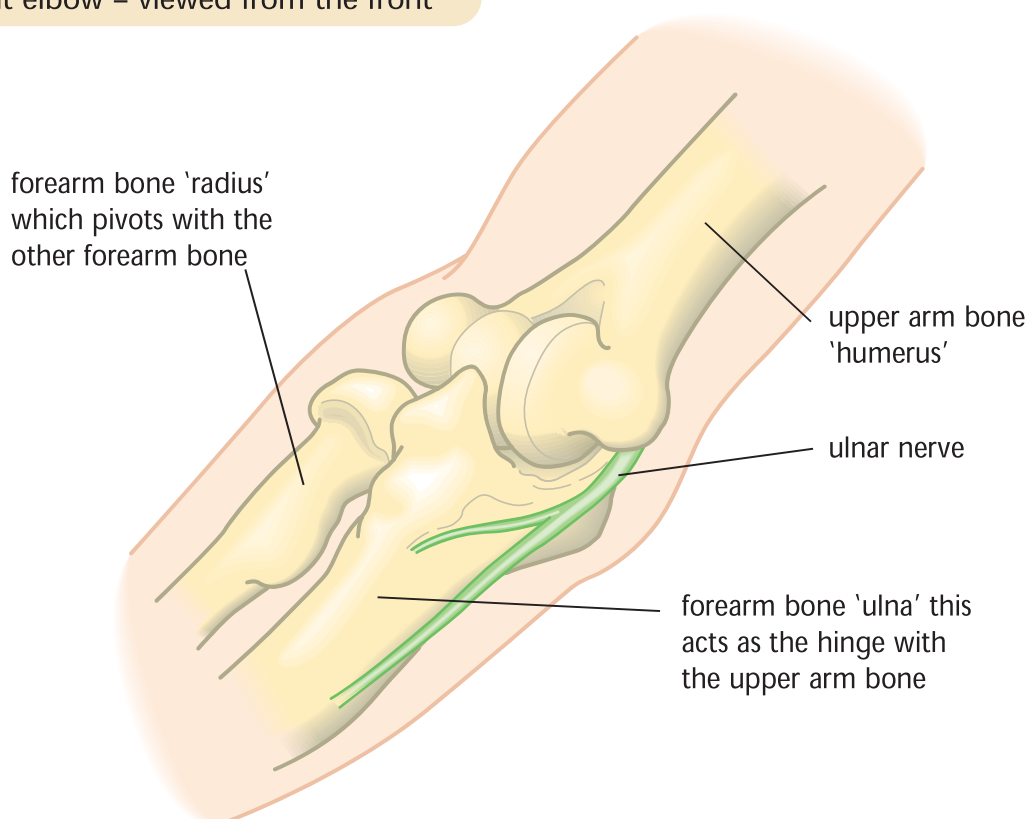
The elbow	4
Why the joint needs replacing	4
About the elbow replacement	5
Risks	6
Common questions about...	
a) pain	7
b) the sling	7
c) exercises	8
d) wound care	8
e) returning to hospital	9
f) things to avoid	9
g) how you may progress	
immediately – discharge	10
discharge–6 weeks	10
6 weeks–12 weeks	11
after 12 weeks	11
h) return to work	11
i) return to driving	12
j) leisure activities	12
Guide to daily activities	12
Exercises (general advice)	
for the first 6 weeks	14
after 6 weeks	18
Contact points for further information	19
Appendices:	
Physiotherapy Guidelines	
Operation Note	

The elbow

The elbow consists of the upper arm bone ('humerus') and two bones in the forearm ('ulna' and 'radius'). See picture below.

The elbow works in two parts. One part acts as a hinge enabling you to bend and straighten the elbow. The second part provides rotation or pivoting of your forearm; for example to put your palm up towards the ceiling to receive 'change' in a shop. The joint has muscles which move it and also some nerves that pass close by (hitting your 'funny bone' gives a nerve sensation into the forearm and/or fingers).

Right elbow – viewed from the front



Why the joint needs replacement

The most common reason for replacing the elbow joint is for arthritis, usually rheumatoid arthritis. However it may be necessary with osteo-arthritis (wear and tear) and following a fracture or bad accident.

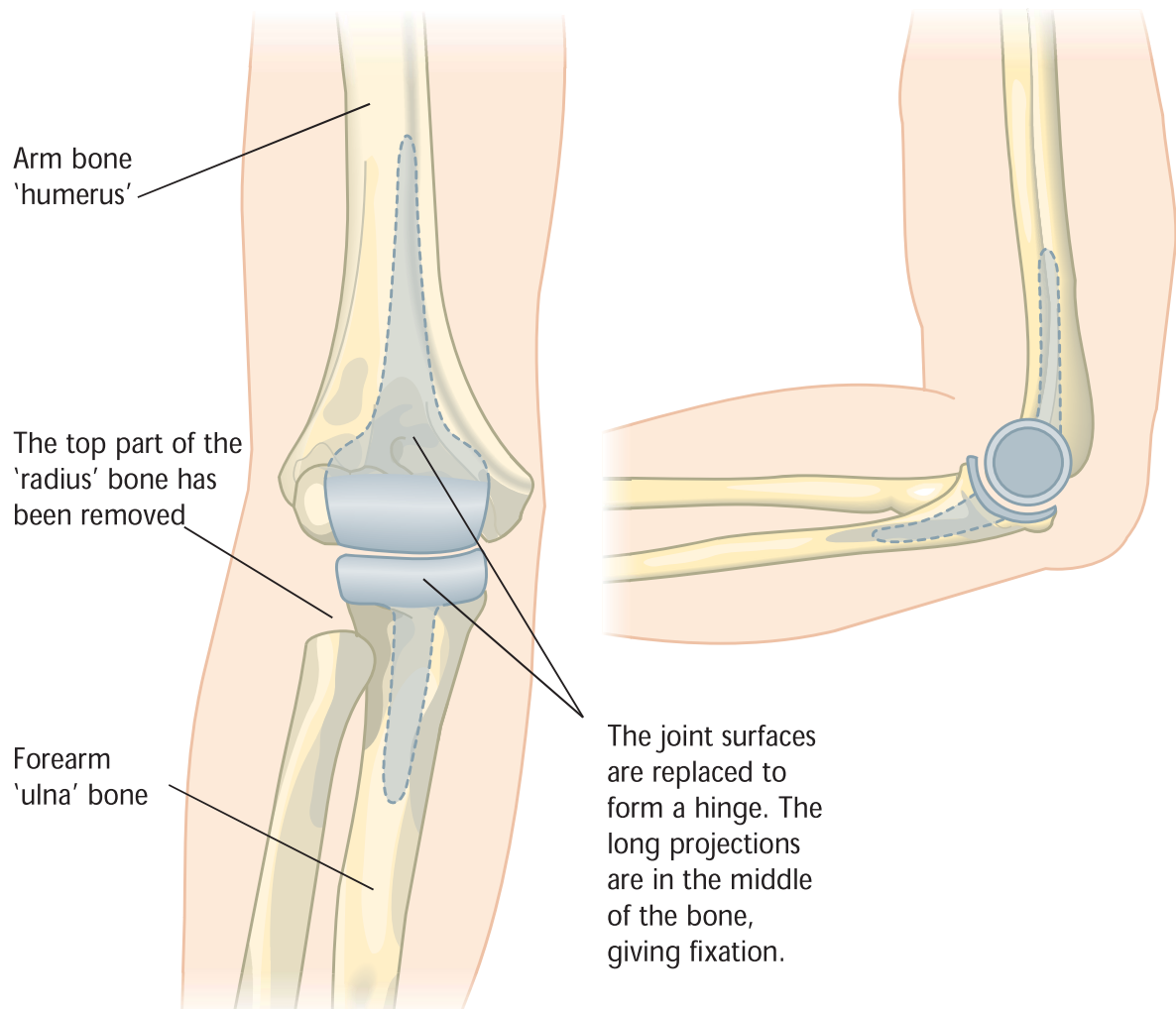
About the elbow replacement

The operation replaces the damaged joint surfaces. There are many different types of elbow replacement. They usually consist of metal and plastic. The surfaces are replaced to give a hinge joint. In addition the top of one of the forearm bones (radius) is removed as this joint can also give elbow pain. See picture below. To get into the joint, the muscle on the back of your arm (triceps) is split and cut away from the bone. This is then re-stitched at the end of the operation.

The main reason for doing the operation is to reduce the pain in your elbow. Ultimately you may also have more movement in your elbow. Bending your elbow to allow your hand to reach your mouth and rotating the forearm usually show the greatest improvement. However, your arm may not straighten-out more after the operation.

Elbow replacement – viewed from the front

View from the side



What are the risks?

All operations involve an element of risk. We do not wish to over-emphasise the risks, but feel that you should be aware of them. They include:

- a) Complications relating to the anaesthetic such as sickness, nausea or rarely cardiac, respiratory or neurological. (Less than 1% each, i.e. less than one person out of one hundred)
- b) Infection – this is usually a superficial wound problem. Occasionally deep infection may occur after the operation. If you get a deep infection in the elbow replacement the new joint will have to be removed. (Less than 2%)
- c) Damage to the nerves and blood vessels around the elbow – temporary damage to the nerve (ulnar) is quite common. This may give pins and needles or numbness in the little and ring fingers. For most people these effects are temporary, for a minority they can remain long term. (Up to 20%)
- d) Loosening of the elbow replacement may result in a need to redo the surgery. (10–20% by 10 years)
- e) Dislocation of the elbow replacement – the new joint can dislocate, which will result in the hinge not working well and you will probably have some pain. This may require a further operation to sort out the problem. (Up to 5%)
- f) Fracture – either during or after the operation. Sometimes the bone is very thin and fragile at the bottom end of the arm bone. It can break off. This will be treated either by a further operation or by wearing a cast to protect it whilst it is healing.
- g) Stiffness and/or pain in (and around) the elbow.

Please discuss these issues with your consultant if you require further information.

Questions that we are often asked

Will it be painful?

Although the operation is to relieve pain, it may be several weeks until you begin to feel the benefit. You will be given pain-killers (either as tablets or injections) to help reduce the discomfort whilst you are in hospital. A prescription for continued pain medication will be given to you for your discharge home. Please visit your General Practitioner (GP) if you require further medication after that.

You will probably have some bruising around the elbow and the arm may be swollen. These will gradually disappear over a period of a few weeks.

You may find ice packs over the area helpful. Use a packet of frozen peas, placing a piece of wet paper towel between your skin and the ice pack. Until the wound is healed, also use a plastic bag to protect the wound from getting wet. Leave on for 10–15 minutes and you can repeat this several times a day.

Do I need to wear a sling?

The sling is to protect the elbow replacement. You will keep it on most of the time for the first few weeks. You do not need to have your arm strapped to your body. You will take the sling off for most of the exercises. If you are sitting and resting you may take the sling off if you wish. The therapists and nurses will show you how to use the sling.

You will gradually wear the sling less after 2 - 3 weeks, but you may find it takes 6 weeks or more, before you are without it all the time. You may find it helpful to wear the sling at night (with or without the body strap), particularly if you tend to lie on your side.

Alternatively you can use pillows in front of you to rest your arm on (please see picture overleaf).



In addition if you are lying on your back to sleep you may find placing a thin pillow or folded towel under your arm will be comfortable.

Do I need to do exercises?

Yes! You will be shown exercises by the physiotherapist. You will start exercises to move the elbow, as well as your shoulder, wrist and hand on the first day after the operation. You will then need to continue with exercises when you go home. Outpatient physiotherapy is not routine, but will be organised if it is felt to be necessary in your case.

You will need to get into the habit of doing regular daily exercises at home for several months. They will enable you to gain maximum benefit from your operation.

The exercises aim to stop your elbow getting stiff and strengthen muscles. Some exercises are shown at the back of this booklet.

What do I do about the wound?

Keep the wound dry until it is healed. This is normally for 10–14 days. You can shower or wash and use ice packs but protect the wound with cling-film or a plastic bag. Avoid using talcum powder or perfumes near or on the scar.

Your stitches will need to be removed by the nurse at your GP surgery after 10 - 14 days. You will need to make an appointment at the surgery to have this done.

When do I return to the Shoulder and Elbow Team clinic at Derriford Hospital?

This is usually arranged for approximately six weeks after your operation. Please discuss any queries or worries you may have when you are at the clinic. Appointments are made after this as necessary.

Are there things that I should avoid?

For 6 weeks

Do not try and push or force your elbow straight. For example pushing through your arm to get from sitting to standing, pushing a door open, polishing surfaces. This is because the muscle (triceps) has been cut and re-stitched in the operation. It takes time to heal before you can put force through it. Even after 6 weeks, take care of this action. However, it is important you do practise trying to straighten your arm as the therapist shows you, just don't use your muscle power to do it!

Try to avoid twisting the elbow with your arm out to the side. For example reaching back to get your seat belt in a car and in the 'throwing' (e.g. a ball) action.

For the rest of your life

It is not known exactly what may cause the elbow replacement to dislocate or become loose, but it is advised that you try to avoid:

- heavy manual work
- lifting objects with any weight (e.g. over 10 lbs)
- forceful pushing and pulling activities.

This will result in you being unable to do heavy gardening (e.g. digging). If your dominant arm has been operated on you are advised not to do sports such as bowls (or else learn to use your non dominant arm). The therapists will be able to advise you on ways to avoid unnecessary stress and strain on your elbow.

How I am likely to progress?

This can be divided into four phases:

Phase 1. Immediately after the operation until you are discharged from hospital

Your arm will be in a sling. Occasionally a splint will be used to try and keep your arm straight. You will start to move the elbow with the help of the physiotherapist, but to begin with you will be quite one-handed. If your dominant hand (right hand if you are right-handed) is the side with the operation your daily activities will be affected and you will need some help.

Activities that are affected include dressing, bathing, hair care, shopping and preparing meals. The occupational therapist will discuss ways and show you how to be as independent as possible during this time. Some common difficulties which are encountered with examples of practical solutions to help are listed in a section later in the booklet ('Guides to daily activities' page 12).

Before you are discharged from hospital, the staff will help you plan for how you will manage when you leave. Please discuss any worries with them. We may be able to organise or suggest ways of getting help for when you are home.

Phase 2. After you have been discharged and for the next 4 - 6 weeks

The pain in your elbow will gradually begin to reduce. Wean yourself out of the sling slowly over this time. Do not be frightened to try and use your arm at waist level for light tasks and to try and move your hand towards your face. Remember not to push your arm straight.

You will be doing regular exercises at home to get the joint moving. If your elbow is particularly stiff, you may be asked to see a physiotherapist as an outpatient. However, often you will just do your exercises at home and we will check your progress in clinic. If you feel unsure about what you can or cannot do, please contact the therapists.

Phase 3. Between 6 and 12 weeks

The pain should be lessening. You may not be using the sling at all or will have reduced the amount of time that you have it on. You can start to use the arm with more force but remember the precautions that you need to take for the rest of your life. Overall,

you will have an increasing ability to use your arm for daily tasks (see driving, work and leisure sections later).

Phase 4. After 12 weeks

Hopefully by this stage you should begin to feel the benefits of the operation. The pain in the elbow joint should be much less than before your operation. In addition you may find that daily tasks are easier to perform. You may still have an elbow that will not go straight, but the other movements often improve. Most improvement will be felt in the first 6 months and this is normally maintained.

When can I return to work?

You will probably be off work approximately 6–8 weeks, depending on the type of job you have. If you are involved in overhead activities you are advised not to do these for 3–6 months. You may be advised to change your employment if you have to do lifting or heavy manual work. Please discuss any queries with the therapists or your consultant.

When can I drive?

It is normally about 6–8 weeks before you can do this safely. You may find it is more difficult if your left arm has been operated on because of using the gear stick/handbrake. Check you can manage all the controls and it is advisable to start with short journeys.

In addition, check your insurance policy. You may need to inform the insurance company of your operation.

When can I participate in my leisure activities?

Your ability to start these activities will be dependent on pain, range of movement and strength that you have in your elbow following the operation. Please discuss activities that you may be interested in with the therapists or hospital doctor. Start with short sessions, involving little effort and gradually increase.

General examples:

- Swimming – after 6 weeks
- Gardening (light tasks e.g. weeding) – after 6–8 weeks

(NB. Heavier tasks e.g. digging – do not do!)

Guide to daily activities in the first 6 weeks

Some difficulties are quite common, particularly in the early stages. The Occupational Therapist (O.T.) will help you to be as independent as possible during your rehabilitation. Special equipment can be borrowed from the O.T. department. Often other joints may be causing problems with pain and stiffness. Everyone is different so your individual needs will be assessed. We appreciate that you may have been having many of these problems before your operation. Please discuss your difficulties with the occupational therapist.

1. Getting on and off seats. Raising the height can help. e.g. extra cushion, raised toilet seat, chair or bed blocks. Remember we would like you to avoid pushing up from a chair using your operated elbow.
2. Getting in and out of the bath. Using a bath board may help although initially you may prefer to strip wash.
3. Hair care and washing yourself. Long handled combs, brushes and sponges can help to stop you using your arm overhead. You may need some help to wash your hair. Have your head down if possible.
4. Dressing. Wear loose clothing, either with front fastening or that you can slip over your head. For ease also remember to dress your operated arm first and undress your operated arm last. In addition dressing sticks, long handled shoe horns, elastic shoe laces and a 'helping hand' can help.
5. Eating. Use your operated arm as soon as you feel able for cutting up food and holding a cup. A non slip mat and other simple aids can help.
6. Household tasks/cooking. Do light tasks at waist level as soon as you feel able e.g. lift kettle with small amount of water, light dusting, ironing. Remember not to push your arm straight for the first 6 weeks. There are various gadgets that can help you.

Exercises

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

It is normal for you to feel aching, discomfort or stretching sensations when doing these exercises. However, if you experience intense and lasting pain (e.g. more than 30 minutes), it is an indication to change the exercise by doing it less forcefully, or less often. If this does not help, discuss the problem with the physiotherapist.

Certain exercises may be changed or added for your particular elbow.

Do short, frequent sessions (e.g. 5–10 minutes, 4 times a day) rather than one long session. Gradually increase the number of repetitions you do. Aim for the repetitions your therapist advises, the numbers stated here are rough guidelines.

After 3–4 weeks you can increase the length of time exercising. Get into a habit of doing them! Good luck.

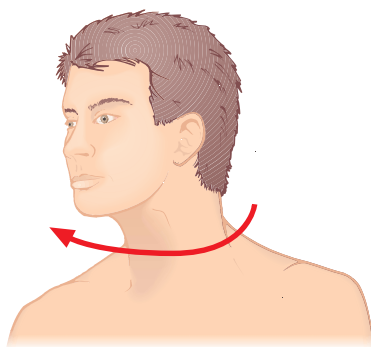
NB. Exercises shown for right arm, unless specified.

Phases 1 & 2

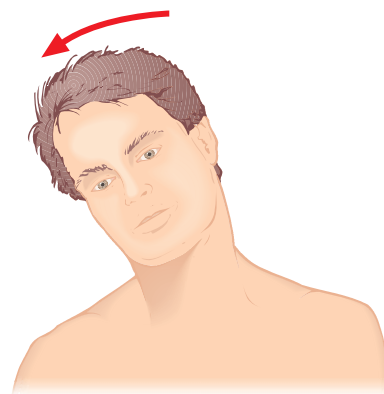
From operation day for 6 weeks

1. Neck exercises

Standing or sitting.



- Turn your head to one side. Repeat 5 times.
- Then turn your head to the other side and repeat 5 times.

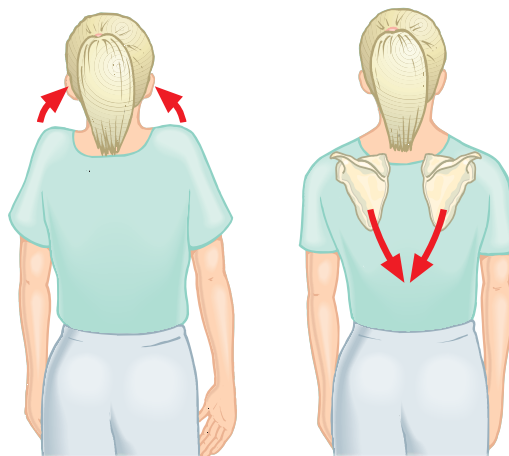


- Tilt your head towards one shoulder. Repeat 5 times.
- Then tilt your head to the other side and repeat 5 times.

2. Shoulder blade exercises

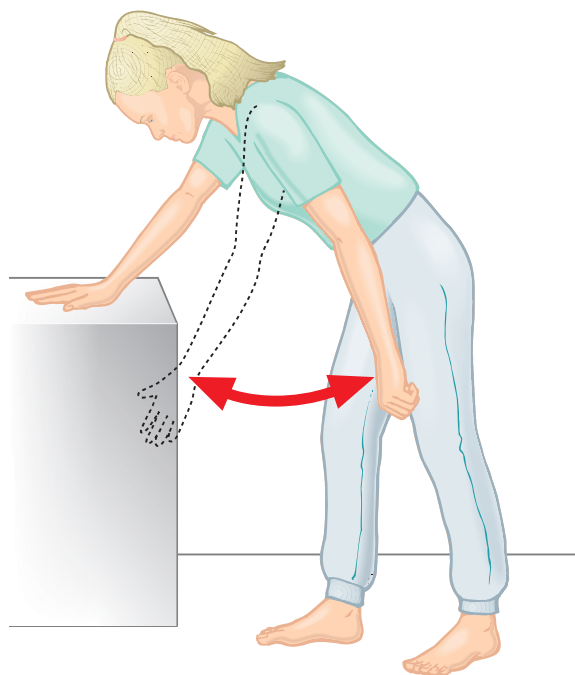
Sitting or standing.

- Keep your arms relaxed. Shrug your shoulders up towards your ears. Then let them relax.
- Repeat 5 times.



3. Shoulder exercises

Stand leaning forwards. (Keep sling on initially.)

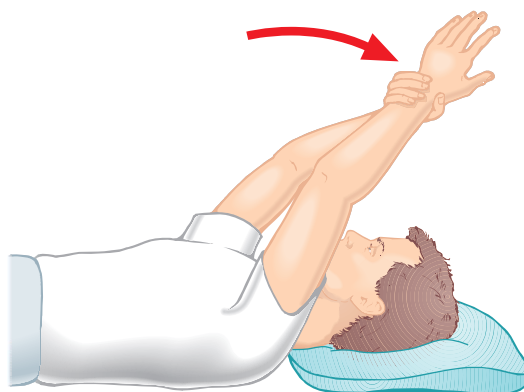


- Let your arm hang down. Swing your arm forward and back, side to side and round in a circle. Progress to doing exercise without sling.
- Repeat 5 times.
(Shown for left arm and without sling.)

4.

Lying on your back on the bed. (Keep sling on initially.)

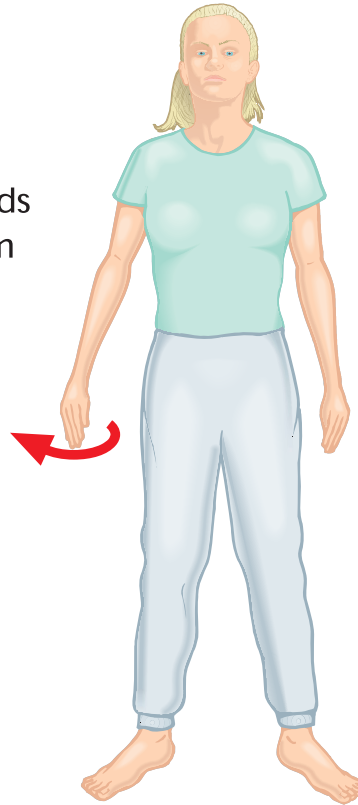
- Lift your operated arm up with your other arm, aiming to get it over your head.
- Repeat 5 times.
(Shown for the left arm with the elbow straight.)



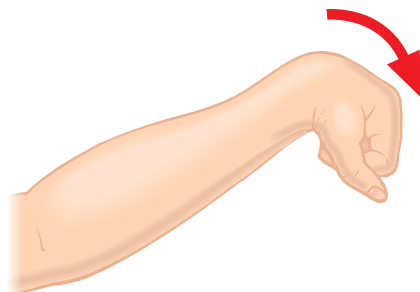
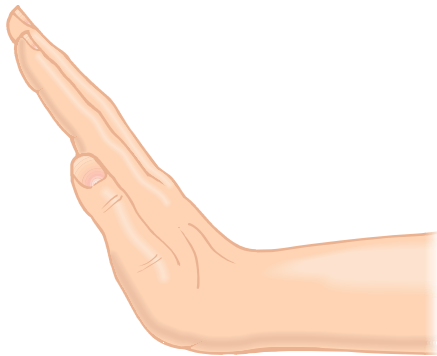
5.

Standing with arm by side.

- Keep the arm by your side but twist it outwards trying to make the palm face forwards.
- Repeat 5 times.



6. Wrist exercises

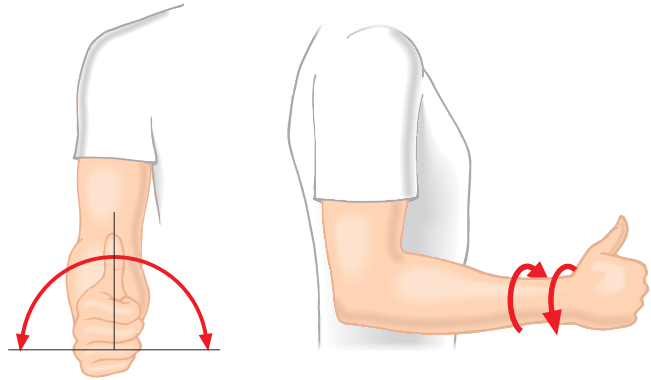


- Keep your arm in the sling or rest your forearm on a flat surface. Keeping your forearm still, move your hand up and down, bending at the wrist. Do this with your fingers straight and bent (i.e. with a fist and without).
- Repeat each 5 times.

7. Elbow exercises

Rotating.

- Rest your forearm on a flat surface. Try and turn your palm up towards the ceiling. Then turn palm down.
- Repeat each movement 5 times.

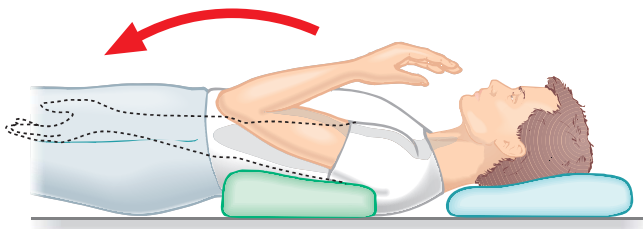


Bending and straightening.

These exercises are important, especially the bending part. It can be done in different positions. The therapist will help you to find the most useful for you.

8. *shown for left arm

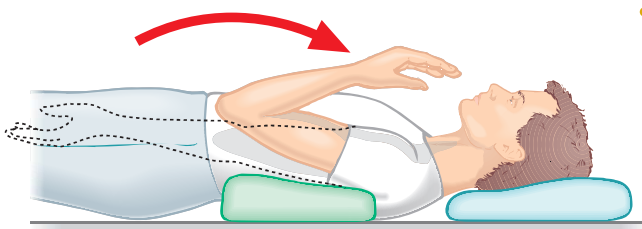
Lying on your back, arm supported.



- Let your arm go straight. **DO NOT PUSH** it straight. Just 'let it go'.
- Repeat 5 times.

9. *shown for left arm

Lying on your back.



- Rest upper arm on bed on small pillow. Use your other arm to help your hand towards your mouth. Gradually do this without using the other arm for help.
- Repeat 5–8 times.

10. *shown for left arm

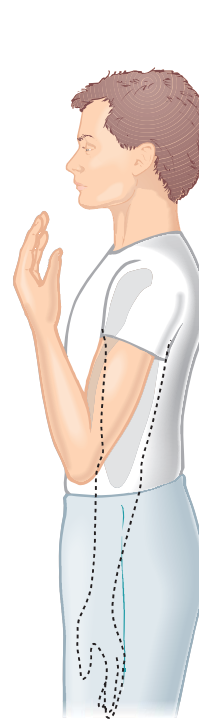
Standing.

- Let your arm relax down straight. Do not push it.
- Repeat 5 times.

11. *shown for left arm

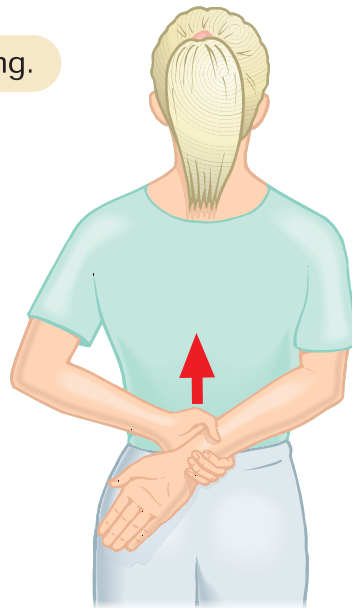
Standing.

- Bend your elbow, trying to take your hand towards your mouth, with the palm facing you.
- Repeat 5 times.



12.

Standing.



- Try and take your hand behind your back.
- Repeat 5 times.

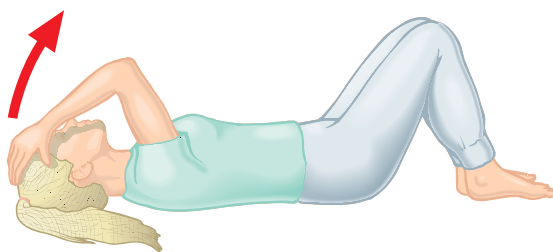
Phases 3 & 4

(6 weeks after your operation)

You can now start using the triceps muscle.

13.

Lying down.

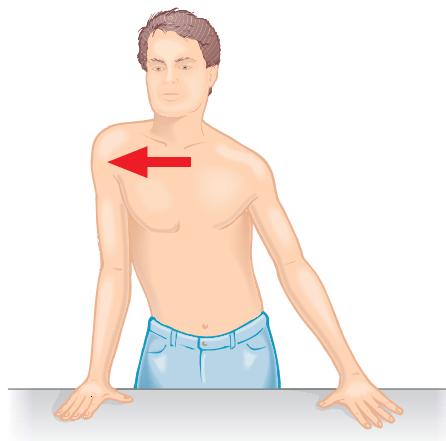


- Rest your hand on your forehead. Then try and straighten your arm up in the air.
- Repeat 5 times.

14.

Sitting or standing.

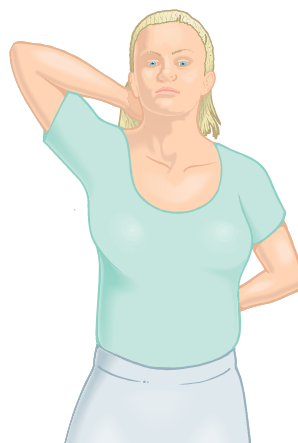
- Arms by your side. Try and straighten your arm and then put a little weight through it. Do not let the arm buckle. Do not push hard.
- Repeat 5 times.



15.

Sitting or standing.

- Try and place your hand behind your head.



Do exercises that you feel will help you to do the things that you wish to do in your life. Not all of these exercises may be required. Do not do weight lifting type exercises unless directed by a therapist. If the movement does not change within 12 weeks, it may not change further. This will be the movement that you will have for daily activities.