

A Patient's guide to

Total Elbow Replacement

This booklet provides information which will help you prepare for admission to hospital. Treatment is always planned on an individual basis so your experience may differ slightly from the information given.

The Shoulder and Elbow unit is a multi-disciplinary team consisting of Specialist Consultant Surgeons, Specialist Training Registrars, Junior Doctors, a Clinical Nurse Specialist, Specialist Physiotherapists, Occupational Therapists and Therapy Technician. All our staff are friendly and available to help you answer any questions that you may have at any stage of your treatment.

Why do I need a Total Elbow Replacement?

The most common reason for a total elbow replacement (TER) is arthritis where the joints have worn out and therefore may have become painful, swollen and restricted in movement. A TER may also be used following a fracture.

Replacement of the elbow is primarily for pain relief to help improve your quality of life.

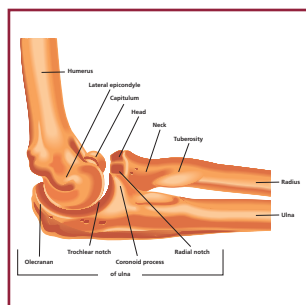
What is a TER?

A TER replaces the damaged joint surfaces with artificial components consisting of metal and plastic. One component will be placed in your upper arm (humerus bone) and the other component will be placed in your forearm (ulna bone) to create a hinge joint. To gain access to the joint an incision is made to the back of the elbow.

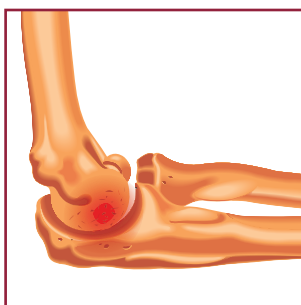
There are various types of prosthesis available and your Consultant will select the best type for you depending on the quality and quantity of your bone. In certain cases a bespoke prosthesis may need to be designed and made for you. This type of prosthesis is designed from a CT scan of your elbow joint.

Basic anatomy pictures

Normal elbow



Arthritic elbow



Picture of prosthesis



What happens before I come into hospital?

Pre-assessment

Shortly before your operation you will be asked to attend a preassessment for anaesthetic and medical screening and you may require a further pre-assessment appointment for the anaesthetist to see you. This is a medical examination to make sure you are well enough for surgery.

You may also be assessed by an Occupational Therapist (OT) and the Clinical Nurse Specialist at the pre-assessment clinic. The OT will review the information you provide, to highlight any concerns that may arise, or how you will cope with daily life following surgery. The Clinical Nurse Specialist will provide you with information about the sling that you will be expected to wear plus obtain consent for recording information about your operation on the National Joint Register. If you have any particular concerns as to how you will manage after your surgery please contact the OT team on the number provided in this booklet.

Contraceptive Pill or Hormone Replacement Therapy (HRT)

You may be required to stop any medicines containing hormones (for example, the oral contraceptive pill, HRT or Tamoxifen) six weeks before surgery. This will be confirmed by your GP or surgeon.

Pre-assessment

People with inflammatory forms of arthritis, such as rheumatoid arthritis, who take traditional disease-modifying antirheumatic drugs (DMARD) or a type of biologic drug known as a TNF inhibitor, have an increased risk of infection following orthopaedic surgery. It is important to manage their medications in the most effective way before undergoing such surgery. Please consult your rheumatologist to confirm whether your medication needs to be stopped or adjusted prior to surgery. Your surgeon will also discuss this with you pre-operatively.

Wearing nail polish, nail decorations or false nails (hands and feet)

Anaesthetic monitoring uses sensors which are clipped onto fingers or toes. Nail varnish, gel, acrylic or false nails will affect readings, therefore these need to be removed prior to your surgery. Failure to do so could lead to your operation being cancelled or delayed. Additionally, these nail types can be a risk of potential infection.

In addition, if you wear rings or any form of jewellery on the side you are to be operated on, you will be required to remove these before your surgery.

Transport

Patients are responsible for their own transport to and from the hospital. You will be informed of your admission and discharge date in advance so that you can arrange for a relative, friend or taxi to transport you. In most cases it will not be appropriate to use public transport on discharge. Please note that patients who wish to claim their travel costs must prove that they are eligible to do so by providing relevant benefit documentation and travel receipts.

If you are eligible for patient transport the assessment team will be able to assess your needs through a brief telephone conversation. The interview remains completely confidential. Transport control room can be contacted on **0800 953 4138**.

What happens on the day of surgery?

On the morning of your surgery you will be greeted by the admission staff on your arrival. You will be assessed by the Surgeon and the Anaesthetist to perform a final check that you are fit for surgery and to answer any questions you may have. You will be asked to sign a form giving your consent to the operation.

Your surgery will be carried out by your Consultant and assistants possibly including other members of the surgical shoulder and elbow team as well as our Clinical Nurse Specialist who is an accredited Surgical First Assistant.

(Please note that most operating lists run all day and your operation may not take place until the late afternoon depending on the order and progress of the list.)

On the ward you will be asked to change into a hospital gown and then be taken to the anaesthetic room where your personal details and the operation will be confirmed once again before you are given an interscalene nerve block and a general anaesthetic.

Interscalene Nerve Block

An interscalene block is an injection of local anaesthetic around the nerves that supply your arm. The purpose of the injection is to provide pain relief for the operation. When you wake up from the general anaesthetic the shoulder and upper arm will be numb.

An Interscalene block is offered for elbow surgery because it is the best form of pain relief for this procedure in the first 24 hours after the operation. It is important that you are aware that it is not the only method for providing pain relief for this type of operation and also that it does not affect what the surgeon will do.

On the day of your operation, your anaesthetist will discuss with you the pros and cons of this procedure. He/She will explain the possible complications and alternatives.

Are there any risks with this surgery?

Although rare, any operation involves potential risks or complications and it is important that you are aware of them.

Specific risks

- **Nerve/blood vessel damage** – There is a small risk of nerve/blood vessel damage around the elbow. If this happens we will investigate it carefully and take appropriate action to restore function.
- **Stiffness** – Stiffness can occur following a TER and is treated through the therapy exercise programme.
- **Fracture (a break) of surrounding bone** - If this happens we may fix the fracture straight away, manage it non-operatively in a brace or alternatively with another operation at a later date.
- **Loosening of prosthesis** - Over a period of time the TER may become loose and further surgery may be required to correct this. This may occur due to infection however over time, the implant may work itself loose as a result of aging and general use of your elbow.

General risks

- **Infection** – All possible precautions are taken to avoid infection during your operation. Your skin is thoroughly cleaned with a disinfectant solution and all clinical staff wear masks sterile gowns and gloves throughout the procedure. If a superficial skin infection develops post-operatively it is usually treated with oral antibiotics.
- **Deep Vein Thrombosis (DVT)** - A DVT is a blood clot in the deep veins of the calf or thigh. To reduce the risk of developing a DVT and to help with your circulation you will be given stockings and will be fitted with special inflatable pads to wear around your legs whilst in bed. These inflate automatically and provide pressure at regular intervals, thereby increasing blood circulation in your legs. You may require blood thinning medication which will be decided by your surgeon depending on your individual risk factors. The physiotherapist and nursing staff will show you how to exercise your legs and ensure that you start to move about quickly after your operation. If a clot develops and part of it breaks away, it can travel to the lungs where it is called a Pulmonary Embolus (PE). A PE is potentially life threatening and so everything is done to prevent a DVT from developing. We ask you to help avoid this complication by wearing your stockings at all times while you are in hospital except when you are bathing.
- **Sickness/nausea, heart problems, breathing problems and nervous system problems** - caused by the anaesthetic.

What happens after the operation?

You will be transferred to the recovery room where you will be closely monitored as the effects of the general anaesthetic wears off. Your arm will be supported in a sling/cast. Initially you may feel some pain or discomfort, which will be helped by medication. If you have had a nerve block, your arm and hand can feel numb and heavy, this will usually resolve itself within 24 hours. The elbow may initially be bruised, tender and swollen and have a dressing over the wound. This will be a water resistant dressing. Please check with your nurses before showering.

You may also have the following:

- Small drainage tube coming from your wound
- Patient Controlled Analgesia (PCA) Device
- Oxygen mask
- A drip to replace lost fluids

These will be removed as soon as possible following the surgery.

Once the anaesthetic has fully worn off you will be encouraged to get up and mobilise, with help if needed, as soon as you are able. This will help prevent the risk of any post-operative complications.

An elbow extension cast may be fabricated for you to use overnight, to be replaced by a sling during the day. This will be made in the plaster clinic usually the day after surgery.

Exercises/Therapy

Following a TER the surrounding muscles and tissues need time to heal, and it is important that you avoid certain movements to reduce the risk of complications. These are guidelines only and may vary between person to person.

0-6 weeks – Protection Phase

Your consultant will state clearly in the operation record your restrictions which your therapist will explain to you. Only move your arm as guided by these instructions.

- Wear the sling at all times, this can be removed for exercises and washing/dressing with the use of a collar and cuff
- You may be required to wear an extension splint at night
- No active use of the operated arm
- Only move your arm as guided by your therapists
- No weight bearing e.g. pushing up from a chair, carrying anything holding a stick
- Keep other joints mobile
- Be active as possible (Keep on your feet)

6-12 weeks

- Gradually wean out the of sling and wear only as necessary i.e. when tired, or in crowds.
- Stop use of extension cast
- Light use only at waist/chest height – i.e. drinking cup plate, buttering bread, brushing teeth, washing face, writing for short periods.
- Pace your initial activities.
- Avoid weight bearing for 12 weeks e.g. pushing up from chair, using a walking stick
- Avoid activities/exercises that increase pain
- Build your general fitness as appropriate, guided by your therapist

12+ weeks

- Return to normal activities within comfortable limits
- Be cautious of activities at the extremes of your movement
- May be able to start gently weight bearing, may begin to introduce walking aid if used on affected side
- May begin to use arm to assist with transfers and walking i.e. using walking aids.
- Be mindful of heavy tasks

Exercises

You will be seen by a physiotherapist after your surgery to discuss your post-operative restrictions and practice your exercises. The physiotherapist will refer you for outpatient physiotherapy, here or locally to you.

DO NOT commence these exercises until guided by a therapist.

Exercises 0-6 weeks:

Neck, shoulder, wrist and hand

These parts of the body will not be directly affected by the surgery and therefore you can move them normally. Complete the following movements as comfort allows:

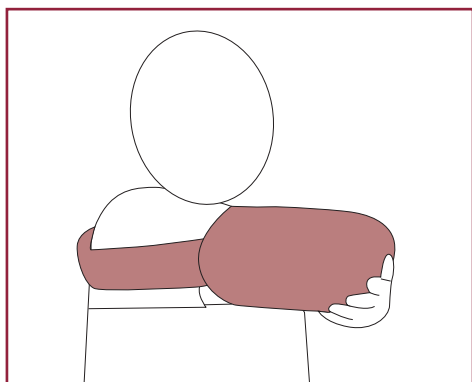
- Neck movements in all directions
- Shoulder shrugs towards height as able
- Freely move wrist and fingers

You may need assistance with the following exercises. If you have any concerns or difficulties with these, please discuss them with your therapist.

Shoulder

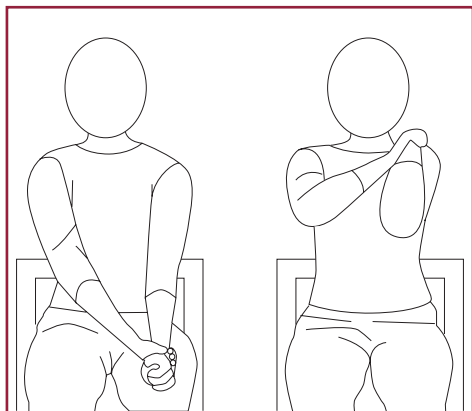


In a sitting position support your operated limb with the unaffected hand, or using a helper. You may prefer to do this keeping your arm in the sling.



Assist raising your arm upwards towards shoulder height as you are able. Repeat 5 times, 2-3 x a day.

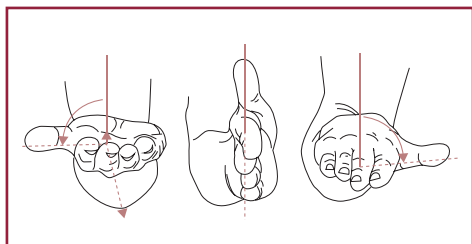
Elbow



In a sitting position support your operated limb at the forearm, with your other hand or a helper. You may prefer to have a pillow under the limb for comfort.

Gently assist the arm into a bent position towards your shoulder. Gently lower arm towards a straightened position. Do not force movements.

Repeat 5 times, 2-3 x a day.



In a sitting position, support your operated arm with a pillow.

Turn your palm upwards and downwards as comfort allows.

Repeat 5 times, 2-3 x a day.

This can also be done in the sling.

Beyond 6 weeks your exercises will be progressed by your out-patient therapist.

Activities of Daily Living

You will be assessed by an occupational therapist after your surgery to discuss how you will manage your daily activities whilst wearing the sling. You will be one handed for a period of time and the following advice gives some tips on how to manage. Any equipment suggested can be purchased through the companies detailed at the end of this booklet.

At 6 weeks most patients can consider returning to activities such as:

- Waist height food prep
- Light lifting – glass of water
- Dressing
- Washing
- Desk work

At 12 weeks you may begin:

- Swimming
- Lifting; very light weights only. Do not push! The recommended maximum is 5 kg the equivalent of a full kettle, light weight vacuum cleaner
- Weight bearing – opening doors, walking aid, push up from chair

Returning to leisure activities

Before restarting any leisure activities it is advised that you discuss them at your post-operative clinic review or with your Therapist. The ability to return to leisure activities will depend on pain, range of movement, strength and the procedure undertaken. Non-contact activities such as gentle jogging, light gym work, light gardening tasks, gentle swimming may be resumed from 3 months.

It is not known exactly what may cause an elbow replacement to dislocate or become loose, but it is advised that patients avoid activities such as:

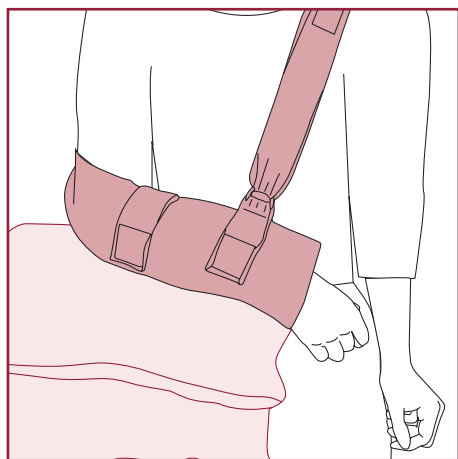
- Heavy manual work, gardening, digging
- Lifting objects weighing over 5kg
- Sporting activities that put a strain on the arm such as racquet sports

Washing and Dressing

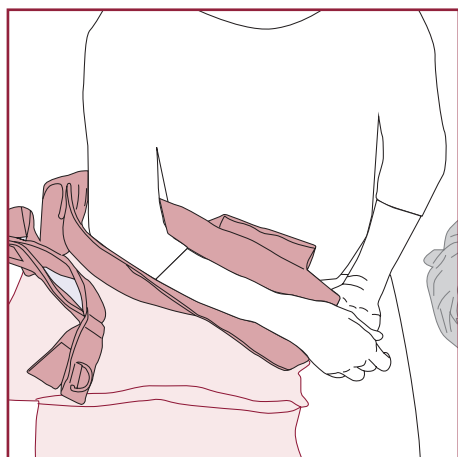
Your occupational therapist will discuss your personal care activities with you. Depending on your restrictions you may be provided with a sling for showering. Showering is advised as opposed to taking a bath to protect the wound and to avoid weight bearing on your operated arm. Your wound dressing is water resistant however you should avoid direct exposure to water when showering. Please be advised that your balance may be affected while wearing a sling and therefore consider safety aspects when stepping in/out of the bath/shower or on uneven ground.

You will require loose clothes that preferably button down the front. Avoid clothing with small buttons, hooks and zips. Consider slip-on, easy fitting shoes. Always dress your operated arm first and undress it last.

Dressing Procedure in a Sling

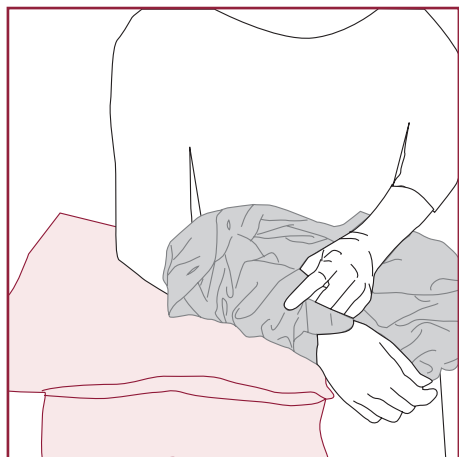


Sit on the bed and place a pillow(s) under your arm so it is rested in the sling position.

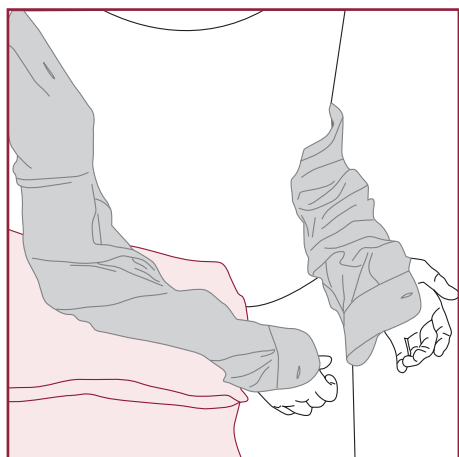


Undo the Velcro fastenings at the elbow and wrist. This will release the shoulder strap. You do not need to undo the Velcro on the shoulder strap.

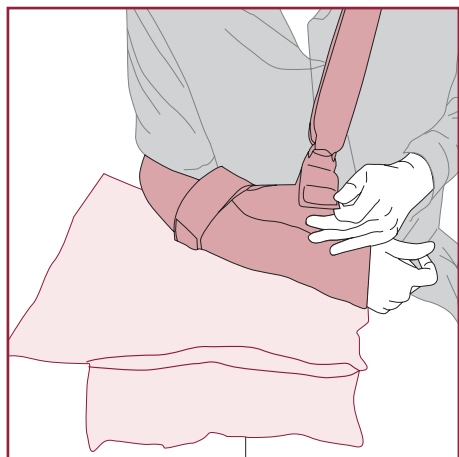
Gently slide out the sling from underneath your forearm by pushing down into the pillows. Keep the operated shoulder as still as possible.



Thread the sleeve onto your operated arm and take the garment as far up to the shoulder as possible. Keep the operated shoulder as still as possible.

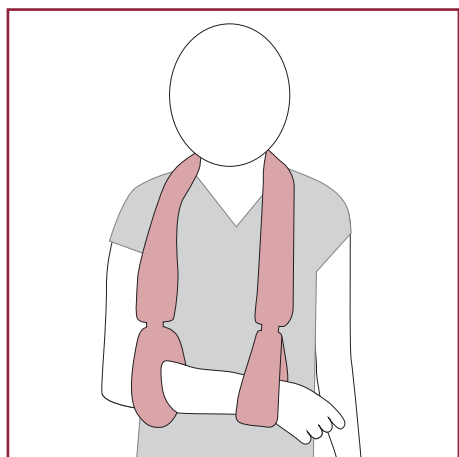


You will then be able to put your non operated arm into the other sleeve, bringing the garment up and around your shoulders to do the clothing up



Replace the sling by gently sliding it under your forearm. Replace the Velcro fastenings. You may need to lean forward to do up the fastenings.

For undressing complete this procedure in reverse.



If you have been provided with a Collar 'n' Cuff for showering use the above procedure for guidance on how to put on and take off.

Sleeping

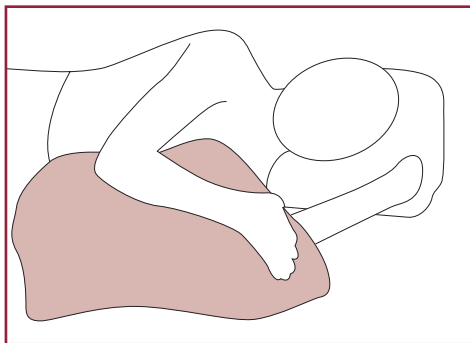
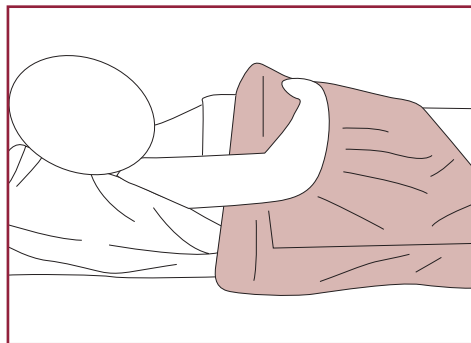
Immediately after the operation, you should avoid lying on your operated arm. Lying on your back may be the most comfortable position. A pillow placed under the operated arm may be more comfortable to support night cast. Your Therapist will advise you.

Resting positions

Rest and good quality sleep are imperative to allow the body to heal. One of patients' main complaints is the inability to find a comfortable position to sleep in.

These two positions are ones that we would recommend.

When resting during the day you can position your arm on a pillow as illustrated below. At night you will be required to wear your extension splint whilst resting your arm on the pillow.



Domestic Tasks

Use ready prepared meals or items that need little preparation e.g. prechopped vegetables. There is equipment available which can help with food preparation, e.g. easy-grip jar openers, pizza cutters, etc. Some of these are available in large supermarkets or from the suppliers which are listed at the back of this booklet. Your occupational therapist will advise you if required.

You should avoid heavy household duties that may put undue stress on your elbow until approximately 12 weeks post op or when advised by your physiotherapist.

Returning to work

You will be off work for approximately 6 weeks depending on the type of job you have. If you are involved in lifting, overhead activities or manual work, this could be considerably longer. Please discuss any queries with the team.

Driving

You should not attempt to drive until you are out of your sling, your pain has subsided and you feel confident in your own ability to control the vehicle in the event of an emergency situation.

You should avoid driving for about 10 weeks, however please confirm this with your consultant. If your ability to drive has been affected you are required by law to contact the DVLA and you may need to inform your insurance company of your operation as your insurance may be invalid.

Going home

We aim to discharge you from hospital within 3 days of the surgery. However, this may vary depending on your needs. The ward nurses may change your dressings if they become soiled and give you water-resistant dressings to take home with you. Prior to discharge we need to ensure:

- Your night cast is comfortable
- You can safely mobilise
- You have adequate social support
- You understand your exercises and precautions
- Your pain is managed with effective pain relief
- Your wound is clean and dry

Aftercare

On discharge a district/practice nurse letter will be provided for them to check your wound. Excessive redness or inflammation of the wound must be reported to your GP or to our patient support line, **0208 385 3024**.

Usually a follow up clinic appointment will be arranged for you to attend at 6 weeks following surgery. If you do not receive a follow up appointment letter within 3 weeks of discharge please contact your consultant's secretary using the numbers in this booklet.

Please note that this is an advisory leaflet only. Your experiences may differ from those described.

Useful contacts

In the event that you are unable to contact a member of the shoulder and elbow team and feel that you have an urgent problem, you should visit your GP or local emergency department for advice.

Physiotherapy/Occupational Therapy Service

Telephone: **020 8909 5820**

Website: **www.rnoh.nhs.uk**

Shoulder and Elbow Unit Secretaries

Mr Falworth – **020 8385 3025**

Miss Higgs – **020 8909 5457**

Mr Majed – **020 8909 5565**

Mr Rudge and Mr Butt – **020 8909 5671**

Clinical Nurse Specialist – **020 8909 5727**

Alternative direct numbers to secretaries:

020 8909 5107 or **020 3947 0052**

Clinical Nurse Specialist (CNS) Shoulder and Elbow Unit

Amanda Denton

Patient Support Line (answer phone response service, non emergency)

Telephone: **020 8385 3024**

Tuesday to Friday 08:00-17:00

Please leave your full name, hospital number/date of birth, a telephone number and the reason for your call. The CNS aims to return all calls within 2 working days.

Should you require urgent medical attention we advise that you contact your GP or attend your local accident and emergency department first.

Equipment

Disabled Living Foundation

www.dlf.org.uk

Patterson Medical

www.pattersonmedical.co.uk

Nottingham Rehab Supplies

www.nrs-uk.co.uk

If you would like this leaflet translated into another language/large print, please contact the Quality Team on 020 8909 5439.

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