

# *Elbow Replacement Guide*



IM-CNOH-12  
Rev. 1  
Issue Date: March 2011  
Review Date: March 2012



CAPPAGH  
NATIONAL  
ORTHOPAEDIC  
HOSPITAL



CAPPAGH  
NATIONAL  
ORTHOPAEDIC  
HOSPITAL



FINGLAS, DUBLIN 11. TEL: 01 814 0429 FAX: 01 814 0381

FINGLAS, DUBLIN 11. TEL: 01 814 0429 FAX: 01 814 0381

# *Elbow Replacement Guide*

## *Introduction*

### Welcome to Cappagh

This booklet is designed to give you and your family and understanding of a total elbow replacement. It aims to explain why the operation is necessary and also give you some information about your new elbow. It tells you about the many health care workers involved in your case before and after the operation. They all play an important role in helping you to achieve a good result.

This booklet will also provide you with information that you may need coming to hospital and on discharge. For this reason you should keep it in a safe place so that you can refer to it from time to time.

If there is anything that you do not understand, please ask your therapist, nurse or surgeon.

*The booklet has been produced by the  
Physiotherapy Department.*

## *Common questions and answers*

### *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.
- b) infection. These are usually superficial wound problems. Occasionally deep infection may occur after the operation.
- c) unwanted stiffness and/or pain around the elbow
- d) damage to the nerves and blood vessels around the elbow.
- e) loosening of the joint components. This normally isn't a problem until several years after the operation.
- f) occasionally, a need to redo the surgery.

### *Will I have a scar?*

Yes. The scar normally lies behind the elbow joint. Every effort is made to make it as acceptable as possible. However, scar formation tends to be variable from person to person.

### *When can I return to work?*

Light work can normally be undertaken at 6 to 8 weeks. Your consultant will give you a more accurate assessment after the operation.

### *When can I drive?*

Driving is not allowed for at least 6 weeks after the operation. Sometimes it is longer than this before you can control a vehicle safely. Be guided by your doctor and therapist.

## *What is an elbow replacement?*

An elbow replacement is an operation in which specially designed components made from metal and plastic are used to replace the damaged parts of the elbow.

### *Why do I need an elbow replacement?*

The most common reason for a total elbow replacement is arthritis, e.g. rheumatoid arthritis, osteoarthritis (wear and tear) or following a fracture. In these conditions the joint surface of the elbow is damaged resulting in pain, loss of movement and restricted joint function.

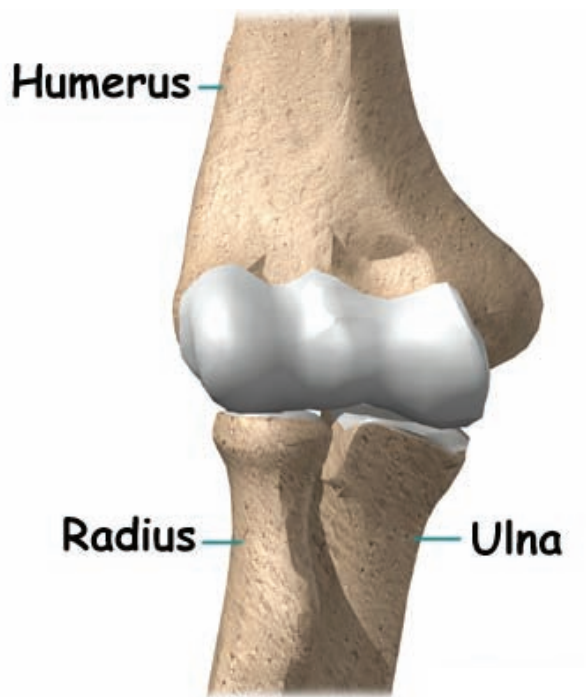
Patients with rheumatoid arthritis have additional problems with the elbow caused by joint swelling and stretching of the ligaments. This can lead to an unstable elbow joint.

The operation is done to relieve the pain caused by arthritis of the elbow. It should relieve most if not all of the pain. It should also restore stability to the joint. Improvements in elbow movement can depend to some extent on how stiff your elbow is before the operation and the condition of the muscles and ligaments surrounding the joint. It is generally expected that bending and rotation movements show the greatest improvement following surgery. However, your elbow may not straighten out more after the operation.

### *What does an elbow replacement involve?*

The elbow is made up of 3 bones, the humerus bone of the upper arm and the ulna and radius bones of the forearm. The humerus and ulna meet to form a hinge joint (Figure 1)

Figure 1: The elbow joint



### *When can I participate in my leisure activities?*

Again this will depend on your progress. Please discuss activities that you may be interested in with your therapist or hospital doctor. Start with short sessions, involving little effort and gradually increase.

### *For the rest of your life*

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

- Heavy manual work
- Lifting objects over 5kg (10 lbs )
- Forceful pushing and pulling activities
- Hobbies involving repetitive throwing



- Do not try and push or force your elbow straight e.g. avoid pushing through your arm to get from sitting to standing.
- Avoid opening and closing heavy push/pull type doors with your affected arm.
- Avoid carrying anything such as shopping bags, trays or household items with your affected arm.
- Take care when doing light activities such as prolonged writing. You will find that keeping your elbow in a fixed position for long periods of time will make it stiff.
- Your occupational therapist can prescribe adaptive equipment to assist you in performing tasks independently while protecting your new joint.

### *When can I return to work?*

This will depend on the type of work you do. It will also be dependent on the pain, range of movement and strength that you have in your elbow.

Office work: You can expect to be out of work between 6/8 weeks post surgery.

Heavy manual/lifting work: You may be advised to change your employment. Please discuss any queries with your therapists or consultant

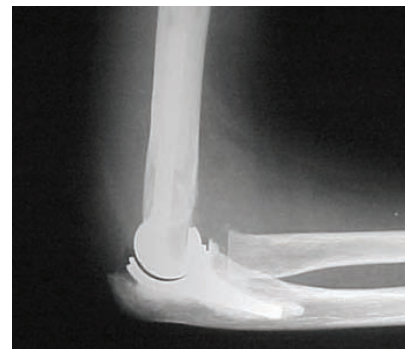
An elbow replacement involves removing bone from the lower end of the humerus and replacing it with a metal component. The top of the ulna bone is then cut and shaped to fit a component made from a high density polyethylene (a type of plastic) (Figure 2)

Figure 2: Components of an elbow replacement



Both components are tested to ensure good alignment and movement has been achieved. They are generally cemented into position. To provide access into the joint, the muscle on the back of your arm (triceps) is cut and then re-stitched after the operation. The surgery is done under general anaesthetic. Figure 3 shows what the replacement looks like on X ray

Figure 3: X ray showing an elbow replacement



### *What happens after my elbow replacement operation?*

When you return from theatre you may have thick dressings around your elbow. In other cases your elbow may be put into a plaster back slab to rest for between 5 days to 2 weeks. This will depend on your consultant's instructions. You can get out of bed the day after your operation. You will be fitted with a collar and cuff for comfort.

When you are resting, you should have your operated arm supported up on pillows. Avoid lying on your operated arm initially. Lying on your back may be the most comfortable position. In sitting, place a pillow under your elbow so that it is supporting the whole forearm. The nurses and therapists will help you with this.

### *What to bring into hospital*

You will need to bring in your usual medication, toiletries, towel and nightwear. All patients following joint replacement in Cappagh are encouraged to dress in their everyday clothing as soon as possible. We have found this promotes a feeling of wellbeing and independence among our patients.

You will require loose clothing that preferably buttons down the front, with easy access to the elbow joint. Avoid clothing with small buttons, hooks and zips. Additionally, consider slip-on, easy fitting shoes.

### *From 6 weeks onwards:*

You can now start using the triceps muscle.

Lying down. Rest your hand on your forehead. Use your other arm to straighten your arm up in the air and lower it down to your forehead. Gradually do this without using the other arm for help.

Repeat 10 times.



**Do not do weight lifting type exercises unless directed by your therapist.**

Strength gradually improves for many months after surgery.

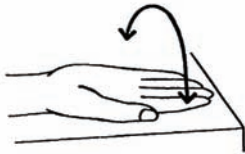
### *What happens when I go home?*

Gradually you can resume light functional activities under the supervision of your therapist. Most people are comfortable by between 6-12 weeks after surgery. Driving can be resumed when you are safe and comfortable to control a car. It is wise to discuss this with your insurance company and consultant. You should expect to not drive for at least 6/8 weeks. Once at home there are a few things to remember:

## Elbow exercises:

These exercises are important. They can be done on different positions. Initially, your therapist may need to help you bend and straighten your elbow in the lying. Gradually, as strength improves, you will find that you can control the movements yourself.

Lying down with a small pillow supporting your upper arm. Your **therapist** will begin to move your elbow up and down.



Sitting with a pillow on your lap. Use your other arm to help bring your hand towards your mouth and gently lower your hand down onto the pillow. Do not force it straight. Gradually as strength improves, you will find that you can control the movement yourself.



Sitting with a pillow on your lap. Use your other hand to turn your palm up towards the ceiling. Then use your hand to turn your palm towards the floor.



## Things to do before surgery

You will need to prepare your home to make things easier when you go home after the operation. You will be unable to reach very far at first or carry anything heavy so move objects you use daily e.g. cups, plates to the kitchen counter. If you cook for yourself, consider making/ baking ready-made meals that are easy to prepare when you get home. Be up to date with the household cleaning and laundry, as you will not be able to do these for a number of weeks.

## Nursing

Specialist orthopaedic nursing is provided on a 24 hour basis from admission through to discharge.

Your nursing requirements will be assessed and specific nursing care will be implemented which will meet your needs before, during and after surgery.

Before, during and after surgery they will closely monitor your pain level and provide prescribed pain relief that will make your post-operative recovery as comfortable and pain free as possible. This will aid your physiotherapy and mobility process. It is important that you inform your nurse or therapist/doctor of any pain you are experiencing.

The nursing staff will monitor your recovery and your progress and communicate with the various other professionals (both in the hospital and community) interested in your care. This will ensure that your discharge home will be as unproblematic as possible.

## *Occupational Therapy*

### *Before Surgery*

The occupational therapist will see you before surgery for an assessment of your level of functioning and to gain an understanding of your daily activities. The assessment includes a medical history with specific reference to pain, sensation, range of movement, and functional limitations. Your occupational therapist will explain and discuss joint protection principles to protect your joints from unnecessary strain, and energy conservation techniques to find the easiest way of doing work, applicable to your own personal circumstances.

### *After Surgery*

Your occupational therapist, depending on your consultant's instructions, may fabricate a support splint. This can be worn day and night, and removed when performing your physiotherapy exercises.

This splint may be worn for 6-8 weeks post surgery and then used as a support when gradually returning to normal function. Your occupational therapist will discuss a programme with you to allow gradual return to your daily activities and he/she will demonstrate joint protection principles specifically related to your individual vocational requirements. The occupational therapist will advise on adaptive equipment and/or alternative techniques to ensure protection of your elbow joint.

### *Pendular exercises*

(You may prefer to keep your sling on initially )

#### Standing:

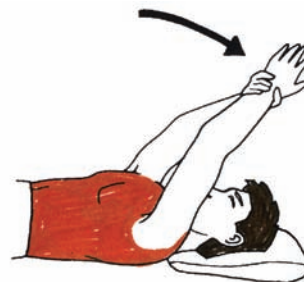
Stand leaning forwards with support. Let your arm hang loose and gently swing your arm forwards and backwards, side to side and round in little circles in sets of 5.



#### Active assisted shoulder flexion:

#### *Lying:*

Lie down on your bed. Use your good arm to lift up your operated arm as comfortable.



## Shoulder shrugs

### Sitting:

Shrug your shoulder to your ears. Relax. Repeat 5 times.



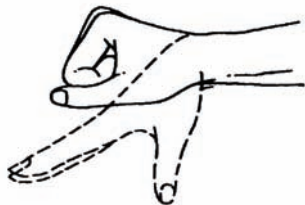
### Wrist exercises

You may keep your arm in a your sling or rest it on a pillow. Bend your wrist up and down. Repeat 5 times.



### Fist:

Squeeze your fingers into a fist. Repeat 5 times.



## Social Worker

The Social Worker in the hospital provides the following confidential services:

1. Professional advice for anyone whose social/emotional problems may be of concern to them or their families in relation to their admission for orthopaedic surgery.
2. Assessment and advice for patients and their families in relation to hospitalisation and discharge. This includes local community services, arrangement of further rehabilitation and convalescence as necessary and general support for patients.
3. Information on Social Welfare and Health benefits and entitlements.

You are also welcome to call to the social worker's office or you may ask reception or the ward staff to contact the social worker for you.

## Physiotherapy

You will be seen by your physiotherapist before surgery. He/she will look at your elbow movements and explain the exercise programme that normally follows an elbow replacement.

The day after surgery the physiotherapist will see you in the ward and you will commence physiotherapy treatment. They will ensure that you are up and mobile.

From day one post operation, it is important to keep your shoulder, wrist and fingers moving after surgery. You should exercise your hand frequently to stop it getting stiff. Squeezing a tight fist and then stretching out your fingers is a good way to do this. Your therapist will also show you how to maintain neck and shoulder range of movement.

Your therapist will progress your elbow exercises according to your consultants instructions. On discharge, all patients are issued with an individualized home exercise programme. **It is vital that your home exercises are done on daily basis in order to gain maximum benefit from your operation.** You will also require follow up out patient physiotherapy treatment to strengthen your muscles and to regain functional use of the arm. This will be arranged prior to discharge.

The following exercises are examples of what your physiotherapist may show you after your operation. They can be practiced before surgery if comfortable. They may differ following surgery. Please be advised by your physiotherapist.

After your operation use pain relief medication and/or ice packs to reduce the pain before you exercises. Do short, frequent sessions e.g. 5-10 minutes, 4 times a day. Gradually increase the number of repetitions that you do.

**From operation day to 6 weeks:**

### Neck exercises

**Sitting:**

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



Tilt your head toward one shoulder. Then tilt your head toward your other shoulder. Repeat 5 times.

