

SURGERY Total Elbow Replacement

SURGERY

Total Elbow Replacement

A Coonrad-Morrey Total Elbow Replacement



What does this involve?

This involves removing the arthritic elbow joint and replacing it with something less painful. Several types of replacement are available.

Some improvements in the range of movement of the elbow after replacing this joint are likely but a normal range of motion is almost never achieved.

The results of elbow replacement are not as reliable as those of hip and knee replacements with 5 year replacement survival rates of about 80% reported. That means that by 5 years after the original operation up to 20% (1 in 5) patients will have required revision surgery for one reason or another.

Following recovery from elbow replacement surgery loading of the elbow should always be limited to less than 10 lbs of weight.

When is surgery needed?

This operation is most frequently performed in patients with arthritis. Sometimes joint replacement is considered following severe fractures. Severe pain is the main reason for surgery. Most surgeons would encourage you to try painkillers, activity modification and steroid injections into the painful joint before recommending surgery. The majority of patients with elbow arthritis manage their symptoms in this way without ever needing an operation.

Lesser operations, such as a joint arthrolysis or radial head excision may be more appropriate for you and have fewer risks associated.

Which operation is the right one for me?

This depends on your symptoms and which parts of the elbow are affected by the arthritis. Your surgeon will discuss your individual case with you.

What are the main risks of these operations?

Swelling, Stiffness and Scar pain

This is a big operation and the arm and hand will be swollen after the surgery. This can be reduced by keeping the arm elevated and moving all the free joints as soon as possible. In most people the general swelling reduces dramatically in the two weeks after the operation.

Local swelling around the surgical site can persist for several months. Local swelling can be helped by massaging the tissues and this may also improve any irritability in the surgical scar.

The elbow will be stiff initially and this will require rehabilitation with the Therapists.

Occasionally patients are troubled by more swelling and stiffness than average. In this case complex regional pain syndrome (CRPS) is sometimes the cause (see relevant information sheet in 'Conditions we Treat'). Severe CRPS occurs in less than 1% of cases.

Infection

Deep infections involving the new joint can occur in up to 8% of total elbow replacements. They may occur early after the surgery or many years later. Deep seated infections require re-admission to hospital, antibiotics into the vein for several weeks and more surgery often with removal/revision of the replacement joint.

Nerve Damage

The ulna nerve is most at risk with this surgery. It runs very close to the elbow and must be found and carefully held out of the way in each case. Up to 40% of patients may experience some ulna nerve symptoms after this surgery but the vast majority settle in the following 6-8 weeks leaving only 1-2% with permanent symptoms. In this case there will be numbness in the little and ring fingers of the hand with 'clawing' of those two digits and wasting and weakness of the small muscles within the hand leaving the hand weakened and less dextrous.

Loosening of the replacement

This occurs in up to 15% of patients by 10 years after the surgery. If the replacement becomes very loose further surgery may be required.

Cont...

Type of Operation	Overnight stay
Length of Procedure	2 hours
Anaesthesia	General Anaesthetic (asleep) and/or a Regional Anaesthetic (arm numbed with local anaesthetic)





Fracture around the replacement

This can occur at the time of surgery or more commonly years later. Rates are reported in between 5-29% of patients. Treatment depends on where the fracture occurs in relation to the replacement and if the replacement is also loosening in the bone. More surgery will sometimes be required.

Fracture of the replacement or wear of the hinge

The humeral component has been reported as breaking in 0.6% of patients by 8 years and the ulnar component in 1.2% of patients by 4.5 years. The hinge between the ulnar and humeral component wears enough to require exchanging in 1-6% of patients by 8 years.

Failure of Tendon Repair

The triceps tendon on the back of the elbow has to be taken off in most cases to perform this surgery and repaired at the end. Failure of this repair occurs in 2-8% of patients and usually requires further surgery.

Post Operative Course

Day 1

- A dressing and padded bandage is applied after the operation. Often a plaster is incorporated in the bandage to keep the elbow out straight and protect the wound whilst it heals.
- · Keep the dressings clean and dry
- · Keep the arm elevated in a sling or on pillows to reduce swelling
- Start moving the finger and wrist joints immediately to prevent stiffness, you will be given an exercise sheet to help you with this.
- Take painkillers before the anaesthetic wears off and as necessary thereafter

Day 2

- You will be discharged home once your pain is under control and your xray has been reviewed.
- Continue to keep the arm elevated and exercise the fingers and wrist.

2 Weeks

- Within the first 2 week you will be seen in clinic for a wound check and removal of the stitches and the plaster.
- Progress your exercises as instructed in your rehabilitation sheet, but do not lift anything heavier than a cup of tea.

6 Weeks

- · A further review in clinic will be arranged.
- Continue with your exercises and gradually start some lifting as symptoms allow.

3 Months, 6 Months, 1 year

- Further clinic reviews will be arranged as required.
- Improvements in range of motion and strength can occur up to 1 year after this surgery

Plaster Cast Information

Contact your surgical centre at any stage if:

- Your fingers become blue, swollen or numb and tingling with a plaster cast in place
- You see any discharge, wetness or detect any unpleasant smells from around your cast
- The cast becomes cracked, soft, loose or uncomfortable.

Outside normal working hours you may need to attend your local Accident and Emergency Department for help with these issues.

Driving

You may drive when you feel confident to control the car. For this surgery it is usually six weeks before you should consider driving again.

Time off Work

This will vary depending on the nature of your job and the exact nature of your surgery.

Sick notes can be provided on the day of your operation, at your clinic visits and by your own GP.