



SURGERY

Ulnar Head Replacement

What does this involve?

This involves removing the arthritic end of your ulna bone replacing it with an artificial joint. The end of the ulna bone is called the ulnar head and the joint it makes with the end of the radius is called the distal radioulnar joint (DRUJ). Various types of replacement are available.

The distal ulna provides forearm rotation against the side of the end of the distal radius. Carefully repairing the soft tissues around the DRUJ is an important part of this operation to avoid the new ulnar head being unstable after this operation.

When is surgery needed?

This operation is considered when the DRUJ is severely painful and significantly interfering with function.

All simple interventions such as painkillers, activity modification, aids to help with certain tasks (opening jars etc) and steroid injections should be tried before surgery is considered. The majority of patients with DRUJ arthritis can manage their symptoms in this way without ever needing an operation.

Which operation is the right one for me?

There are a number of surgical alternatives to an ulnar head replacement. The right option for you depends on what you feel about surgical risks, your functional requirements and the pattern of arthritis you have. Options include:

- Wrist denervation – this involves removing the small nerves that supply sensation to the wrist joint. In some people this can relieve pain for a few years enough to allow you to function more effectively.

- Partial ulnar head excision – this involves removing part of the ulnar head only (the arthritic joint surfaces next to the radius) and leaving the side part intact. This keeps most of the important soft tissue attachments of the ulnar head attached.
- Total ulnar head excision – this is also known as a 'Darrach's procedure' after the person who originally described it. The remaining stump of ulna takes over the function of forearm rotation after this operation.
- DRUJ fusion and proximal ulnar excision – this is known as a 'Suave-Kapandji procedure' after the people who originally described it. Instead of removing all the ulnar head the end part is fused to the side of the radius and a small section of the ulnar before the fusion site is removed to provide forearm rotation.

In addition to the DRUJ you may have arthritis in the main part of your wrist which may need dealing with at the same time as your DRUJ.

Your surgeon will discuss the options for your individual case with you.

Normal Wrist Xray



Wrist bones
Ulnar Head
End of distal radius

Ulnar Head Replacement



Type of Operation

Day Case

Length of Procedure

45 minutes

Anaesthesia

Regional Anaesthetic (whole arm numb) and/or General Anaesthetic (asleep)



What are the main risks of this operation?

Swelling, Stiffness and Scar pain

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.

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

This is unusual in the hand (less than 1% of cases). Local wound infections can often be treated with oral antibiotics. Rare, deep seated infections may require re-admission to hospital, antibiotics into the vein and occasionally more surgery.

Nerve Damage

The nerve most at risk with this operation is a branch supplying skin sensation on the back of the little finger side of your hand. The lost patch of skin sensation from these injuries might be irritating but should not affect how your hand works.

Loosening of the components in the bone

This can occasionally occur over time and might mean further surgery is necessary.

Wear of the new ulnar head against the radius bone

This has not been a major problem but occasionally does occur (5% over 3 years) and might mean further surgery is necessary.

Instability of the new ulnar head

This can occur occasionally (5% over 3 years) and might mean further surgery is necessary.

Residual Joint Discomfort

This operation is good at relieving pain but rarely completely eradicates it. One study found an average pain score of 1.8 out of 10 after this surgery, as rated by the patients.

Post Operative Course

Week 0 – 2 post surgery

- A dressing and padded bandage with a plaster cast incorporated is applied after the operation
- Keep the dressings clean and dry
- Keep the arm elevated in a sling or on pillows to reduce swelling
- Start moving any joints that are not immobilised immediately to prevent stiffness
- Take painkillers before the anaesthetic wears off and as necessary thereafter

During the first two weeks

- An appointment will be made for a wound check, dressing change and a removable splint to be fitted
- Further rehabilitation will be arranged with the Hand Therapists

Plaster Cast Information

Contact your surgical centre 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, even in an emergency.

It is usually at least one month before you should consider driving again. You should discuss it with your insurer if you are considering driving with a splint in place.

Time off Work

This will vary depending on the nature of your job.

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