

Orthopaedic Department

Arthritis of the wrist and total wrist fusion

A wrist fusion is an operation to permanently stiffen the wrist and aims to control pain in an arthritic wrist.

In a normal joint, cartilage covers the ends of the bones and allows them to move smoothly and painlessly. When a joint has osteoarthritis the cartilage 'cushion' wears out and the bones may begin to rub on each other.

Symptoms

Patients often complain of pain most commonly a deep ache and stiffness in the wrist. Painful actions may include lifting and bending the wrist. Loss of movement can affect people's ability to perform day-to-day tasks.

What is the cause?

- Osteoarthritis (wear and tear arthritis)
- Rheumatoid arthritis
- Past injuries to this joint especially fractures may increase the risk of developing osteoarthritis

Treatment

- Rest and splints to stop the activities that aggravate the condition
- Anti-inflammatory medication
- Physiotherapy – this may include exercises to strengthen the wrist, splinting and pain relieving treatments



Patient Information

- Injection of a steroid and local anaesthetic to help reduce the inflammation and the swelling, this may need to be done under X-ray imaging.
- Surgery

Surgery – Wrist fusion

A wrist fusion is performed to stiffen the wrist and prevent the worn areas of bone rubbing on each other. It is generally performed for pain relief. Despite the loss of wrist movement the reduction in pain helps improve everyday function.

Before you come into hospital for your surgery please make sure that you have removed all jewellery, especially rings on the arm/ hand that is to be operated on. Also please take off any nail varnish, gel or false nails

What happens at surgery?

The surgery is sometimes a day case procedure but bone grafting may be required, and if so, you may need an overnight stay. Sometimes the surgery can be performed under a Regional anaesthetic where you remain awake but the arm is put to sleep, but often a general anaesthetic is needed. A shaped plate is held across the back of the wrist joint with screws into the bone to secure fixation. The surgeon will carefully remove the remaining cartilage from the wrist joint to allow the bone to completely solidify underneath the plate.

You will be given exercises before you leave the hospital to ensure you regain full range of movement in the fingers and forearm. You will require pain relief to enable you to do light activities and to enable you to exercise effectively.

What are the possible complications?

Swelling is common and it is advisable to keep the hand raised for the first few weeks after surgery. The wrist may be supported with a plaster cast for several weeks until the underlying bones have solidly united.

Patient Information

The main risk is that of non-union; where the bone ends fail to completely grow over. This is, however, uncommon. Other risks include infection (less than 1%), damaging blood vessels/nerves (less than 1%), and tendon injury (less than 1%).

How long will I be off work?

You can expect to return to work within a few weeks of surgery depending upon the nature of your job. Jobs involving heavy work may require you to remain off work until the bone ends have joined together (two to three months).

When can I drive?

You are advised not to drive for the first two weeks following the operation. You should be able to grip the steering wheel without pain or distraction, look over your shoulder and perform an emergency stop. You are advised to inform your insurance provider in advance of returning to driving.

Further information

The day surgery unit can be contacted on 02476 966861 / 02476 966868 (University Hospital), or on 01788 663264 (Hospital of St. Cross). For further information please visit our hand service's web site at www.UHCWhand.org or contact:

- Our plaster room technicians at Hospital of St Cross on 01788 669143
- Our plaster room technicians at University Hospital Coventry on 02476 96909
- Hand Therapy at University Hospital Coventry & Warwickshire on 02476 966016
- Hand Therapy at Hospital of St. Cross, Rugby on 01788 663257
- Our specialist hand surgery nurse / hand-coordinator on 02476 965072

Patient Information

The Trust has access to interpreting and translation services. If you need this information in another language or format please contact us on 02476 966861 and we will do our best to meet your needs.

The Trust operates a smoke free policy.

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