

Wrist arthritis information sheet

What is it?

Arthritis causes the destruction and damage of the normal cartilage that covers the surface of the bones that form the wrist. It takes 2 distinct forms:

- 1.Osteoarthritis- commonly known as 'wear and tear" it is caused by repetitive use or trauma to the joint. It leads to thinning and ultimately destruction of the smooth cartilage of the wrist joint, leaving bare bone to rub against bare bone. It's incidence increases with age and a history of injury to the wrist joint.
- 2. Rheumatoid arthritis- this differs from osteoarthritis as the destruction of the joint is caused by the patients' own body (autoimmune) The condition leads to damage to the building blocks of cartilage, tendon and other soft tissues.

What are the symptoms?

Most patients will present with symptoms of pain, stiffness, swelling and deformity within the wrist joint. This can lead to a reduction in hand and wrist function and an inability to carry out simple, everyday tasks and hobbies. Patients with severe disease may find they have pain at night which disturbs sleep or pain at rest.

Do I need any further investigations?

YES. All patients will need x-rays of the wrists and some may require CT, MRI or ultrasound scans to help Andy plan treatment. Sometimes patients require an initial wrist arthroscopy (link to wrist arthroscopy page) as well.

Patients with a new diagnosis of rheumatoid arthritis will require blood tests and a referral to a rheumatologist who will work closely with Andy to help improve your symptoms.

What is the treatment?

Unfortunately it is not yet possible to regenerate damaged cartilage in the wrist joint so the mainstay of treatment for wrist arthritis is management of pain and preservation of movement. In the early stages of wrist arthritis, simple analgesia, splinting, hand therapy and activity modification will improve your symptoms. Occasionally Andy will inject the wrist joint with steroids to help reduce the inflammation in the joint.

As the arthritis worsens and is not controlled by simple measures it may become necessary to intervene with surgery.

Wrist Arthroscopy

In some patients a wrist arthroscopy (Link to wrist arthroscopy here) may be performed by Andy. This allows him to assess the extent of damage to the wrist cartilage. Loose bits of cartilage and inflamed tissue can be removed from the wrist at the same time, helping to improve symptoms.

PIN neurectomy

In young patients with pain and established arthritis, Andy may perform a small operation to cut the small nerves that supply the sensation of pain to the wrist. This is done as a day case procedure under general anaesthetic. It may take up to 6 months to feel the befit of the procedure and most patients require further surgery at a later date.

Partial/ Total wrist fusion

In cases of severe arthritis where the pain that has become unbearable, Andy may opt to fuse some, or all of the bones in the wrist solid. This prevents bare bone from rubbing on bare bone which causes the pain; however, depending on the operation performed, all or a significant amount of wrist movement will be lost. This is not as daunting as it first sounds as the shoulder and elbow compensate for this very well. Most patients who undergo this operation are very pleased to be pain free. Andy usually applies a plaster cast to the wrist to be fused for 2-3 weeks to simulate the lack of movement to be expected, how much the pain should improve and how well you will be able to cope after the operation

Wrist replacement

Total wrist replacement for arthritis is still in its very early stages of development and although replacements available on the market, Andy does not yet perform these, as he believes there isn't enough long-term evidence to support their use in his practice at the moment.

How long will it take to recover?

1. Wrist arthroscopy

After the operation, the wounds are closed with small sutures and dressings and a bandage are applied. You will be given a sling to keep your wrist elevated and help reduce swelling. You will be reviewed at 2 days by your hand therapist who will take down the bandage and get your wrist moving.

The sutures are removed at 10-12 days

2. PIN Neurectomy

A bandage dressing will be applied to the hand/ wrist after the operation. You will be seen by a hand therapist at 2 days who will remove this, clean and redress the wounds for you. The hand therapist will get you moving your hand very early after surgery to avoid stiffness. The stiches are removed at around 10 days and Andy will review you at that point. Following your 2-week appointment your hand therapist will get your hand more and will also advise how to help soften and desensitize the scars

3. Partial/ Total wrist fusion

After the operation a temporary plaster splint will be applied to the wrist. Your hand therapist will see you at 2 days for advice regarding hand movements and avoiding swelling. Andy will review you in his clinic at 2 weeks at which point the splint be replaced with a lightweight below elbow plaster. This will be worn for 4-6 weeks. One removal you will spend a lot of time with the hand therapist to get your fingers and hand working again.

What are the potential complications?

- Infection Uncommon and usually treated very successfully with antibiotics.
- Delayed healing- Smokers and those with diabetes are more prone to this.
- Painful/ Tender Scars- the vast majority of patients complain of some discomfort around the scar and thumb, this is know as pillar pain and generally resolves with time. Rigorous wound care and desensitization as directed by your hand therapist help prevent this.
- **Delayed/ Non union-** in patients who smoke or with other medical problems, the bones of the wrist may be slow to fuse or may not fuse at all. If this is the case, further immobilization in plaster or other operations may be required.
- Damage to surrounding structures- inadvertent damage or stretching to surrounding nerves may cause some numbness around the scars, although this should improve with time.
- **Stiffness** Operations to the hand cause stiffness; this can be minimized by working closely with your hand therapist.
- CRPS- An uncommon but potentially serious complication of hand surgery leading to pain, stiffness, swelling and discomfort. It is impossible to predict this problem but working closely with you hand therapist and getting your hand moving early has been proven to significantly reduce the risk of this.

When can I get back to normal activities?

The hand MUST be kept clean and dry for 10 days until the sutures are removed. Depending the site and extent of your surgery you should be able to return to "desk job" type activities within 1-3 weeks of the operation.

Any manual work, heavy lifting or sporting activities should be avoided for at least 2-8 weeks. You may return to driving in around 1-6 weeks.

Please inform your insurance company that you have recent hand surgery to ensure that are happy for you to do so.