

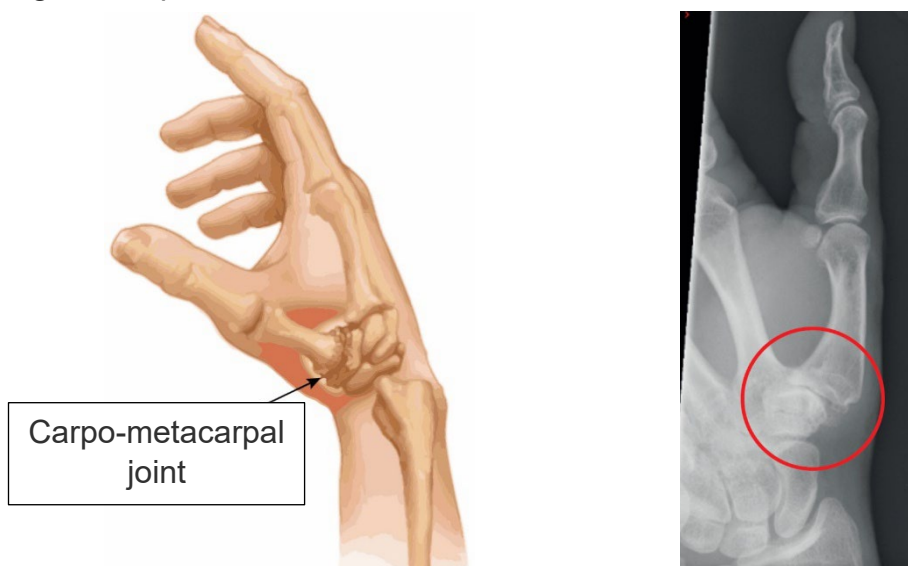


Base of thumb arthritis

You have been diagnosed with base of thumb arthritis. This leaflet explains what the condition is and outlines treatment options.

What is base of thumb arthritis?

The joint at the base of the thumb (the 'basal joint'), between the metacarpal and trapezium bones (1st carpo-metacarpal joint), becomes arthritic as people age. This is osteoarthritis, which is caused by loss of the smooth cartilage surface covering the ends of the bones in the joints. The cartilage becomes thin and rough, and the bone ends can rub together. Osteoarthritis can develop at any age, but usually appears after the age of 45. It may run in families, and it sometimes follows a fracture involving the joint many years before. Arthritis of the basal joint of the thumb is common in women and less common in men. **X-rays** show it is present in about 60% of women over the age of 60, but many people with arthritis of this joint do not have significant pain.



What are the symptoms?

- Pain at the base of the thumb, made worse by using the thumb.
- Tenderness if you press on the base of the thumb.
- Difficulty with tasks such as opening jars, turning a key in the lock etc.
- Stiffness of the thumb and some loss of ability to open the thumb away from the hand.
- In advanced cases, there is a bump at the base of the thumb and the middle thumb joint may hyperextend (be out of place), giving a zigzag appearance.

How does this condition progress?

Often, the pain becomes less noticeable with time. The arthritis itself will still be present and never improves, but the symptoms from it often go away completely over the course of a few years.

Most older people have this condition but few complain of ongoing pain. Base of thumb arthritis rarely does any significant harm, and likewise, using the thumb normally in the presence of pain does not do any harm to the joint, even though it hurts.

How can it be treated?

It is important to note that treatment is not necessary for the arthritis itself, but may help with pain control. Secondly, all interventions given by a doctor, nurse or physiotherapist carry a small risk, and although this is rarely a major problem, a tiny proportion of patients have life changing complications from steroid injections or surgery.

Pain relief treatment options

- 1) **Modification of activity:** Small changes to the way you do things will avoid pain in the base of your thumb – you will already have worked this out! It is not worth avoiding painful activity altogether, since using the hand in the presence of pain does not harm the thumb in any way.
- 2) **Splints:** Rigid splints (metal or plastic) are effective but make thumb use difficult. A flexible neoprene rubber support is more practical. However, there are some rigid splints on the market that allow normal wrist movement and may make it easier to work while wearing the splint – ask your physiotherapist for advice.
- 3) **Physiotherapy:** Working to maintain movement can delay the onset of stiffness but can sometimes aggravate pain.
- 4) **Simple painkillers:** Although painkillers can be useful from time to time, the routine use of painkillers is not recommended. All painkillers carry a risk of side effects, and although some painkillers such as ibuprofen can be effective for this type of pain, regular use can give rise to complications such as a stomach ulcer or cardiac and kidney problems. Stronger painkillers can be addictive and are not recommended.
- 5) **Steroid injection:** Steroid injections can provide pain relief for a single troublesome joint, by reducing the inflammation in the joint. These injections carry a risk and do not usually provide anything other than short-term pain relief. See [Steroid injection in the hand](#) leaflet.
- 6) **Surgery:** Surgery is a last resort, as the symptoms often stabilise over the long term and can be controlled by the non-surgical treatments above.

What operations are available?

Your doctor will decide which surgical option is most suitable for you. Generally the following are options:

- **Trapeziectomy** or removal of the trapezium bone is the most commonly performed operation. This has a good track record for relieving pain. However, the thumb is considerably weaker and less stable following this operation, so the decision to operate involves weighing up whether the potential pain relief obtained is worth the sacrifice of function.
- **Fusion** of the joint. Fusing the joint can also provide good pain relief in a small group of patients who are generally young, manual workers. The results are far less predictable, with a relatively high complication rate. Fusing the joint restricts the mobility of the thumb significantly, so with this operation the pros are pain relief on one side and loss of movement as the main drawback on the other.
- **Joint replacement surgery** is more recently being done for arthritis at the base of the thumb for certain patients. As this is a fairly new procedure the long term results are awaited.

Further information

- The British Society for Surgery of the Hand (BSSH) <https://www.bssh.ac.uk/patients/>
- The Royal College of Surgeons of England have some patient information publications available on their website www.rcseng.ac.uk/patient_information

Contacting us

If you require any information or advice from the Hand Therapy Team, you can contact us at the Royal Berkshire Hospital during office hours Monday to Friday via the Clinical Administration Team (CAT 5): 0118 322 7415 or email rbb-tr.cat5@nhs.net.

To find out more about our Trust visit www.royalberkshire.nhs.uk

Please ask if you need this information in another language or format.

RBFT Hand Clinic, Orthopaedics, January 2024

Next review due: January 2026