



Thumb base arthritis

Reviewed: June 2024 Next review: June 2025 Version 2

About this leaflet

The purpose of this leaflet is to tell you about Thumb Base Arthritis and how it can be treated.

About thumb base arthritis

Osteoarthritis of the basal thumb joint is very common. It is much more common in women than men, especially after menopause.

Symptoms

Common symptoms include:

- Pain when you make a gripping or pinching motion, e.g. turning a key in the lock, opening a jar.
- Swelling and tenderness at the base of your thumb.
- Loss of strength in your hand.
- Distortion of the thumb base.
- Reduced range of movement of your thumb.

Causes

The basal joint of your thumb, called the carpometacarpal joint, is very mobile and relies on many ligaments to keep it stable. If your ligaments are loose, it can change how the bones work together within the joint. This, in turn, can cause "wear and tear" of cartilage, meaning the surfaces can no longer glide over each other, and causing pain.

Diagnosing thumb base arthritis

Diagnosis is usually made by:

- talking about your symptoms and the troubles you are having,
- examining your hand
- having some x-rays taken.

It is important to consider whether there are other problems within your hand that could be contributing to or causing your discomfort. It is common to have another condition in your hand such as carpal tunnel syndrome as well as thumb base arthritis.

Treatment options

If you have thumb base arthritis, it should always be treated initially with non-surgical care. Surgical treatment is possible when these treatments are not successful, or they are no longer controlling your symptoms.

Non-surgical treatment

Non-surgical treatment for thumb base arthritis involves:

- a period of modified activity modification (not doing heavy activities or actions that can cause you pain),
- taking non-steroidal anti-inflammatory medication,
- wearing a splint, and
- doing regular physiotherapy exercises.

A steroid injection into the affected joint can also improve your symptoms. This is often done under x-ray or ultrasound guidance to ensure it is delivered to the right spot.

Many patients notice a significant improvement in the comfort and function of their hand and need no further treatment, while some choose to use a splint during heavy activities.

If your symptoms persist despite non-surgical treatment, surgery may be an option.

Surgical treatment

There are a number of surgical options for thumb base arthritis, depending on how severe the arthritic changes within and around your thumb base are. Your surgeon will discuss the options with you.

- Ligament reconstruction: In very early thumb base arthritis, a ligament reconstruction can improve stability around your thumb base, resolving pain and improving strength.
- Trapeziectomy: Once your articular cartilage is damaged, surgery on the trapezium (one of your wrist bones) is required. The most common operation is a trapeziectomy to remove the trapezium bone. This is very effective at treating the pain but permanently weakens grip and pinch strength. Given the pain relief that occurs following surgery, most patients find that their hand function is significantly improved.
- Fusion of the metacarpal and the trapezium: Occasionally, if you are a very young patient with
 isolated thumb base arthritis, a fusion of the metacarpal and the trapezium might be appropriate.
 While this maintains as much grip and pinch strength as possible, it will stiffen your thumb and
 reduce your range of movement. It may also create unusual wear patterns and predispose you to
 arthritis between the other small bones of the wrist.

Recovery period

Recovery from any surgical procedure on the trapezium is quite long, and it may take six months until you can return comfortably to heavy activities. Such a long recovery period can make the decision to have surgery quite difficult. Your surgeon will be able to answer all your questions and assist you in making the decision to proceed with surgery or maintain the status quo. Following surgery, 90-95% of patients achieve good to excellent results.



If you decide not to have treatment

It is likely that the arthritis at the base of your thumb will worsen, but it is not life-threatening. Many patients prefer to put up with the pain and alter their activities. Sometimes your symptoms may resolve with time.

Surgical treatment should have the same rate of success if it is performed at a later stage.

Contact

If you have any questions or concerns, please email **handsurgery@gjnh.scot.nhs.uk** or contact the orthopaedic clinic during office hours on 0141 951 5553.



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