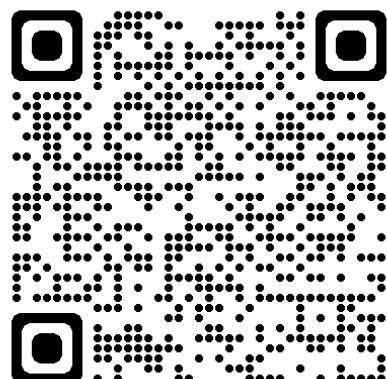




BASE OF THUMB ARTHRITIS INFORMATION



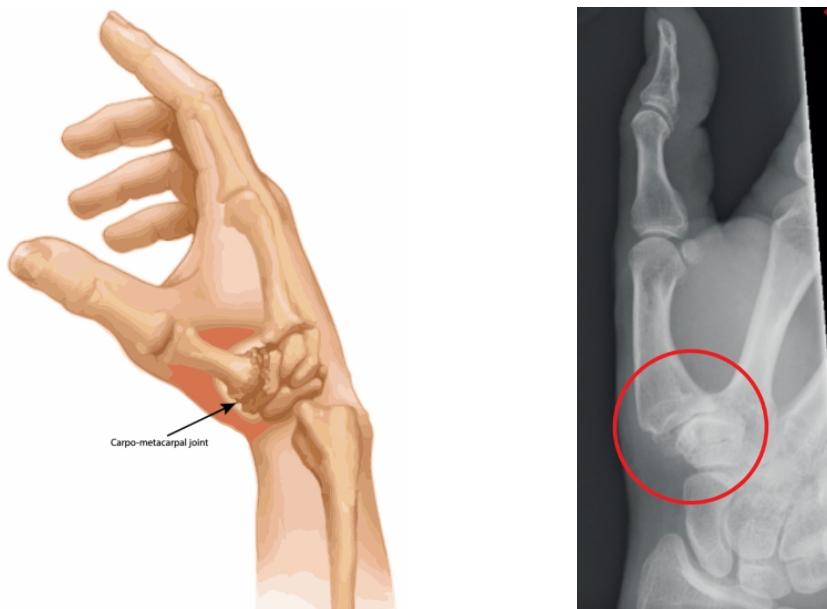
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What is base of thumb arthritis?

The joint at the base of the thumb, 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. Osteoarthritis has a characteristic appearance on X-ray, which you can read about on our website www.fifevirtualhandclinic.co.uk.

What are the symptoms?

- Pain at the base of the thumb, aggravated by thumb use.
- 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, giving a zigzag appearance.

What is the Natural History?

The natural history of this condition is often that the pain 'burns out' with time. The

arthritis itself is always present, and never improves, but the symptoms from it often go away completely over the course of a few years. All very elderly patients have this condition, but few complain of ongoing pain.

Thumb based 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.

Pain is the body's defence mechanism to alert the brain to the possibility of harm. Pain is usually a protective mechanism and helps people avoid burns and cuts, or alerts to something which has '*gone wrong*' in the body.

Pain from osteoarthritis can, therefore, make people worry about their hands – and this worry usually has two forms:

1) If the base of my thumb is as painful as this now, what will it be like in a year or two?

Generally speaking, pain burns out with time, and the chances of symptoms being much worse in a year or two are small. There is no good correlation between the degree of arthritis and the amount of pain people feel, but even the reassurance that the pain is likely to burn out makes it easier to cope with.

2) If it is painful to use my thumb, am I doing any harm by using it, and should I rest it?

There is no harm in using the arthritic thumb normally. Normal use of the hand does not cause the condition to worsen; ageing and genetics are responsible for the rate of deterioration.

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.

The options for pain relief include:

1) Modification of activity – small changes to the way you do things will avoid pain in the thumb base – 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 which allow normal wrist movement and may make it easier to work whilst wearing the splint.

3) Physiotherapy – working to maintain movement can delay the onset of stiffness.

- 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.
- 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.

There are 2 operations offered in Fife for this condition:

- 1) **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.
- 2) **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 scales have pain relief on one side and loss of movement as the main drawback on the other.

You can read more about having an operation on your hand and steroid injection on our website www.fifevirtualhandclinic.co.uk

Alternative Operations (not offered in Fife):

Interposition arthroplasty consists of a trapeziectomy (above) using something to fill the space left by the trapezium bone. Some surgeons use a piece of tendon taken from the wrist, and others use small carbon implants. The results of these procedures in the literature are similar to trapeziectomy, but with no clear advantage, and with a little extra risk.

Joint replacement surgery is now a good alternative in many places, although this is dependent on the experience and training of the surgeon. The long term results of joint replacement are beginning to be understood, but this is not a widely offered operation as yet.