Arthritis in the joint at the base of the thumb is very common. It occurs between the thumb metacarpal (long bone) and the trapezium, which is one of the smaller bones in the wrist. The medical name for the joint is the ‘first carpo-metacarpal joint’, commonly known as the basal joint of the thumb. It is a saddle-shaped joint which gives the thumb a large range of motion. However, it is one of the factors that makes the joint prone to degradation. This degradation causes pain, which is initially related to activity, including pinching and gripping. For some people, this can progress to pain when resting and deformity at the base of the thumb.

What are the symptoms?
Initially, there might be pain related to certain activities. People often say they experience pain when they pinch their thumb to open packets or peel vegetables, or that they don’t have a strong grip anymore, due to pain. As the arthritis progresses, there may be obvious swelling at the base of the thumb, pain even when resting and a thumb that appears crooked. This progression varies from person to person.

How is it diagnosed?
Your GP may be able to recognise the typical features of this form of arthritis, or they may refer you to a hand therapist or hand surgeon to make the diagnosis and begin treatment. X-rays may be taken, but they do not always show abnormalities in the early stages.

How is it treated?
Treatment is based on the severity of symptoms and the appearance of the joint on the X-ray. The treatments available include:
- modifying activity – avoiding things that make it worse
- physiotherapy to strengthen and support the thumb
- painkillers
- splints
- steroid injections into the joint
- surgery.
Hand surgery

Hand surgery is usually undertaken in a day (no overnight stay needed) either by numbing the whole arm or with a general anaesthetic. Your surgeon will explain the expected recovery time and potential risks of surgery. You will usually be referred to a hand therapist after surgery.

There are two main surgical options:

(a) Trapeziectomy

This is the most common form of surgery and involves a complete removal of the trapezium. Some surgeons fill the gap left by the removed bone using a piece of tendon from your wrist. To fill the space left, you may be given an artificial metal and plastic joint, or a silicone rubber spacer.

(b) Arthrodesis

This type of surgery is much less common. It is only suitable for certain people - for example, those who have developed arthritis under the age of 40, who need to do heavy manual work. It is only possible where the bones are sufficiently robust. However, this procedure sometimes fails to solve the problem and the trapezium still needs to be removed.

Recovery

Every surgeon will have a different approach to managing recovery. You will need to keep your hand elevated for at least 48 hours after surgery to prevent excessive swelling. When you walk, do not let your hand dangle by your side, and when you sit, do not let it rest in your lap.

Recovery times vary. Around two to four weeks after the operation, the dressing/cast will be changed to a light plastic splint. Look out for any redness or infection. The splint can be removed each day to exercise the thumb, or to wash according to specific therapy advice for your recovery.

You will be given a wound review appointment approximately 5-10 days after your surgery. A splint will be made for your hand. The splint can be removed during the day four to six weeks after the operation. It should still be used at night for another two weeks.

Physiotherapy can now begin, which will allow the thumb to recover its full range of movement. Any exercise which causes pain should be stopped.

Recovery time

This operation results in a major change to the way your thumbs works. Your body takes time to rebuild the structures around the base of the thumb and to learn to move in a different way. Recovering the early movement takes six to eight weeks, but increasing the strength of the thumb pinch can take six months.

Pain

After surgery, your hand will be painful. Take pain relief medication for the first 48 hours and thereafter, as necessary.

Risks of the surgery

Nerve damage

There is a rare possibility that an area of numbness may occur along the side of the thumb. This is usually temporary. A nerve supplying the skin over the back of your thumb can become irritated, but there are therapy techniques that can improve this.

Scar tenderness

The scar may remain tender after it has healed. It should also be encouraged to soften, so that the tendons moving the joint below the scar can move freely and easily. This is routinely treated by regularly massaging yourself. Using cream or oil may be helpful.

Infection

As with most operations, there is a chance of infection occurring. These can be treated with antibiotics.

Complex Regional Pain Syndrome

This can occur following any hand trauma, including surgery. Around 5% of people have a reaction to hand surgery and their hand becomes painful or stiff after the procedure. This varies in severity and is treated with therapy.
If you drive
You can return to driving when you feel you can control the vehicle safely. This is usually 6-12 weeks after surgery. You can return to work when you feel you have enough strength and control to carry out your job. It may be up to six months before you can undertake heavy tasks and it may take up to 12 months for the soreness to subside. Insurance companies usually prefer that you do not drive wearing a rigid splint – it can reduce your grip and control of the steering wheel. Driving becomes easier and more comfortable when you start using a soft splint, which is typically around four weeks after the procedure.

Exercises
The below photos are examples of exercises you may be advised to do as part of your recovery, after surgery. However, all exercises should be designed specifically for you and started when your surgeon advises, so you may be asked to do variations of these.

1. Support the thumb below the end joint (nearest the nail, sometimes called the IP joint), opening out the palm. Bend the thumb tip and straighten, avoiding firm pressure. (This exercise can be done every hour while wearing a splint)
2. Make a fist and then straighten your fingers. If you cannot make a fist, use the other hand to help you push the fingers into a fist.
3. With your forearm supported on a flat surface, such as a table, and the hand relaxed over the edge, lift the hand upwards and hold the stretch (3.1). Let the hand drop down towards the floor (3.2). With the side of your hand on a flat surface, move your wrist backwards (3.3) and forwards (3.4).
4. With your thumb bent, touch the base of your little finger, then back again. Straighten your thumb so that it is level along the backs of all three thumb bones (4.1), then bend across your palm, towards your little finger (4.2).
5. Placing the side of your hand on a flat surface, bring the thumb away from in front of the index finger and then back again (5.1). Or, to put it another way, open and close the thumb.
6. Touch each fingertip with your thumb.
How Arthritis Care can help you

Want to talk to someone about your arthritis?
Or read more about the condition?

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We have over 40 free booklets and factsheets on various aspects of arthritis, from diet and surgery, to managing pain and fatigue. These can be sent to you in the post – just ask our Helpline staff for details.

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To make a donation all you need to do is visit arthritiscare.org.uk/donate
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Thank you

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