

Osteoarthritis at the base of the thumb

What is it?

The joint at the base of thumb, known as the carpometacarpal joint, allows the swivelling motions of the thumb. In a normal joint, cartilage covers the ends of the bones and allows them to move smoothly and painlessly. In an osteoarthritic joint the cartilage wears out and the bones rub against each other. This causes pain at the base of the thumb, particularly during pinching and gripping. It also reduces the ability to be able to pinch.

What has caused it?

Osteoarthritis is common in women and not uncommon in men. The underlying cause for arthritis of the base of the thumb is not clear as it affects some more than others. The presence of osteoarthritis in this joint does not mean that you are going to get osteoarthritis in other joints of your body. Past injuries to this joint may increase your risk of developing it.

How is it diagnosed?

The doctor that you see in the Hands Outpatients Department will ask you some questions about your symptoms. The doctor will also examine your hand. Sometimes an x-ray is taken to confirm the findings.

What is the treatment?

Symptoms can be helped by resting the joint. Regular Paracetamol and anti-inflammatory medication (cream, gel or tablets) have also shown benefit. Immobilisation of the joint with splints can also relieve the pain. Some may benefit from a steroid injection, temporarily. More severe cases may require surgery.

There are several operations that are used depending on the case.

Trapeziectomy - the small bone, the trapezium, at the base of the thumb is removed. Sometimes the joint is then stabilised using a tendon.

Fusion of the joint - the trapezium bone is fused to the bone next to it.

Denervation - the small nerves surrounding the joint are carefully divided, so that they cannot cause pain.

Metacarpal osteotomy - a cut is made into the metacarpal bone to allow it to be repositioned to provide better use of the joint.

Joint replacement - the joint can be replaced with an artificial joint. Research into using implants made of organic polymers placed in between the affected joint is ongoing.

What sort of anaesthetic will I have?

You will usually be given a regional block anaesthetic, which numbs the whole arm by an injection in the neck or shoulder. This offers a lower risk than a general anaesthetic and a quicker recovery time. Occasionally, a general anaesthetic (GA) where you are put to sleep can be necessary. The anaesthetist will discuss this in more detail with you.

You will need to arrange for transport home if you travelled in yourself as you will not be able to drive for 4 - 6 weeks.

Will there be a scar?

There will be a scar, approximately 2 inches long, to the base of the thumb.

How successful is the treatment?

Non-surgical treatment using splints and tablets or injections can be very helpful for many patients with osteoarthritis of the base of the thumb. If the condition progresses, surgery may be required. The best operation depends on the particular circumstances of each case. Your surgeon will advise you which options would be best for you and what the advantages and disadvantages of each one are, so that you can make an informed decision.

Your management following surgery will vary, depending on the type of surgery you have, but often it will involve having your thumb protected for up to 6 weeks in plaster before starting therapy.

What are the risks and benefits of surgery?

The surgical options are highly successful in relieving pain but do not improve strength or pinch or grip. However, it may be up to 6 months before you feel you can use the thumb normally again.

A very small proportion of patients (approximately 1 in 3,000) may develop a severe reaction after hand surgery, with problems lasting around 2 years but can be possibly lifelong if unresponsive to treatment. There is also a risk of damage to the nerves in the back of your hand resulting in temporary or even permanent numbness.

If you are concerned about any of these risks, or have any further queries, please speak to your consultant.

What happens if I do not have any treatment?

Only you know how well you can manage with the problems that you have with your thumb and how it impacts on the quality of your life. Left alone it is likely to stay as it is or to get slowly worse. The thumb may get weaker and more painful in the long term, with increased stiffness.

When will I be able to drive after the operation?

Most of the operations for osteoarthritis at the base of the thumb mean you will be unable to drive for approximately 6 weeks.

How long will I be off work?

Depending on the type of work you do, and whether your dominant hand is involved, you may be off work for between 3 weeks to 3 months.

Follow up appointment

You will usually need to wear a plaster cast for the first 2 weeks after the operation. The stitches are then removed. Commonly the thumb is supported in a splint for a few more weeks, but this will depend on the particular procedure performed.

If you have any queries or require further information, please telephone your consultant's secretary on the relevant number below:

Mr Armstrong's secretary:	(01332) 788077
Miss Arrowsmith's secretary:	(01332) 783390
Mr Bainbridge's secretary:	(01332) 785252
Mr Cresswell's secretary:	(01332) 785254
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Miss Horton's secretary:	(01332) 783387
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Miss O'Brien's secretary:	(01332) 785254
Mr Russell's secretary:	(01332) 785253