



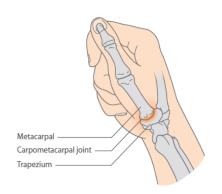
Osteoarthritis of the Thumb Carpometacarpal Joint A patient's guide

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1. What is the Thumb Carpometacarpal Joint?

The carpometacarpal Joint (CMCJ) also known as the basal joint, is where the trapezium in your wrist (a carpal bone) articulates with your first Metacarpal bone. This joint is much more susceptible to osteoarthritis (OA) than other finger joints because of its shape mobility and large forces translated through it when using your hand.



2. What is Osteoarthritis (OA)?

Osteoarthritis is the most common form of arthritis and can affect any joint in the body. In a healthy joint, the ends of each bone are covered in a smooth protective cartilage. Cartilage helps the two bones glide with ease. When OA develops in a joint, the cartilage becomes thinner and rougher and eventually, in severe cases, no longer covers the joint surface. The lack of cushioning causes the bone underneath to thicken and the edges of the joint to grow in bony 'spurs', these are the nodules you can sometimes feel. In severe OA, this process may change the shape and movement of the thumb as the joint is no longer held in its natural position.



3. Common symptoms of CMC OA

Pain: Usually felt as a sharp or aching pain at the base of the thumb. The pain is usually made worst with movement and relieved with rest. You may also experience a grating sensation known as crepitus. Sometimes there may be pain in the joint at rest or at night if the joint is inflamed. The pain may vary over time and the pain can improve with time even if the OA is severe.

Reduced Grip: Difficulty to grip objects using the thumb, your dexterity may be affected, and it may be difficulty to do things which require force through the thumb (for example: opening jars, turning keys, peeling or cutting vegetables).

Stiffness or loss of movement and altered shape: Movements of the thumb can be limited by pain and the joint may feel stiff. Over time there may be a loss of abduction of the thumb (difficulty stretching away from the palm) and it may become harder to place your hand and thumb flat on a table. It may appear as a bump at the base of the thumb and a hyper extension in the middle joint (giving a zigzag appearance). However, most people still retain their ability to use the thumb and may find it becomes less painful even if some movement is lost.

4. Management of the condition and options for treatment:

Exercise

Exercise is important to reduce joint stiffness, maintain range of movement and strengthen the muscles that help to stabilise the thumb joint. The effect of exercises can vary depending on the stage of arthritis, so the following are examples of commonly recommended exercises. The exercises should not harm your thumb, so if you feel increasing pain (particularly at rest) or are unsure, please seek advice from your medical practitioner. Always build up your exercises gradually to prevent exacerbation of pain. Try warming your hand before exercises by soaking in warm water or using a commercially available heat pack or paraffin wax bath. Repeat exercises 3 times a day

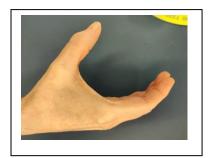
Stretches and exercises for the thumb:



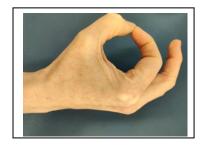
Try placing your hand flat on a surface and use your other hand to gently stretch the thumb away from the palm – stretch at the base of the thumb and hold for 10 seconds. Repeat 5 times.



After stretches, actively move your thumb away from the palm. Repeat 10 times.



Turn your hand to the side so your thumb is facing upwards towards the ceiling: try to stretch the thumb up away from the palm: up towards the ceiling and at right angles to the palm -making a "c" shape. Repeat 10 times.



Practice making an "0" shape with your thumb and index finger, touch each fingertip maintaining the "0". Repeat 10 times.

To help strengthen the muscles of the thumb you can use gentle resistance (for example, soft therapy putty or playdoh). You can complete similar exercises as above. Increase repetitions gradually to prevent exacerbation of pain at rest.











Joint Protection and assistive devices

The aim of joint protection is to reduce the load placed on your joints during activities of daily living. Joints that are weakened by arthritis are at risk of being damaged by strain, this can lead to impaired function and deformity.

The primary principles of joint protection are to balance activity and rest by pacing strenuous tasks and to alter your technique to reduce stress on joints affected by arthritis. Try to spread the load over several joints or use larger stronger joints instead of straining your thumb, for example, using an L-shaped handled knife for cutting or a cone shaped jar opener. Use less effort; push or slide heavy items and consider using assistive aids. Some examples of gadgets to help with household tasks which can reduce the stress on the thumb joint are shown below.



Splints

There are many commercially available splints designed for the thumb. The type of splint needed may vary depending on your symptoms, the current range of movement of your thumb and the splint purpose. Some splints may immobilise your thumb more and restrict the functional movement of the thumb. These may help if you have considerable resting pain and are designed to rest the joint and reduce inflammation and pain. Some examples are shown below.



Commercially available thumb Spica:





Some splints allow more movement of the thumb for functional use and aim to hold the thumb in a better position for the basal joint to reduce stress on this joint, such as: The 'Push CMCJ' or Neoprene thumb splint.





Custom made thermoplastic splints can also help to reduce pain when it is severe, but these should be fabricated by a qualified therapist.





A Splint can be worn at rest or during functional activity, but it is important to remove it regularly to prevent stiffness or weakness of the thumb. Please consult your therapist if you need further advice on the type and wearing regime for splints.

Pain management

Some people find relief of pain through non-medical means with the use of heat or cold. Warm water soaks, hot water bottles, paraffin wax baths or microwaveable wheat bags can be used with care. Ensure you follow the manufacturer's instructions and do not apply direct or extreme heat direct to the skin.

If the joint is feeling hot and possibly inflamed, you may find a cold compress (for example frozen peas/ice wrapped in a towel) more helpful. Do not apply extreme cold direct to the skin or for longer than 10 minutes at a time. You should not use extreme temperature if you have numbness or significant loss of sensation in your thumb or hand.

Over the counter medication such as Paracetamol, Ibuprofen or topical anti-inflammatory cream may reduce pain. Your pharmacist or Doctor can advise on dosage and whether the medication is suitable for you. If your pain is not controlled by these means a cortisone/steroid injection into the joint may provide some temporary pain relief and you should discuss the suitability of this with your doctor.

Surgical intervention

There are several surgical procedures for the management of thumb pain when the conservative methods described above have not helped. Common procedures may involve removal of the arthritic bone, replacement of the joint (arthroplasty) or fusion. You may wish to discuss whether surgery is suitable for you with your doctor or therapist.

5. Further information

Organisations providing information and support for people who have arthritis:

Versus Arthritis: WWW.versus.arthritis.org

Disabled Living Foundation provide advice and on-line shop – www.completecareshop.co.uk

www.livingmadeeasy.org.uk

www.essentialaids.com

www.nrshealthcare.co.uk

www.abilitysuperstore.com



Patient advice and liaison service (PALS)

If you have a compliment, complaint or concern please contact our PALS team on 020 7288 5551 or whh-tr.PALS@nhs.net

If you need a large print, audio or translated copy of this leaflet please email whh-tr.patient-information@nhs.net. We will try our best to meet your needs.

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