

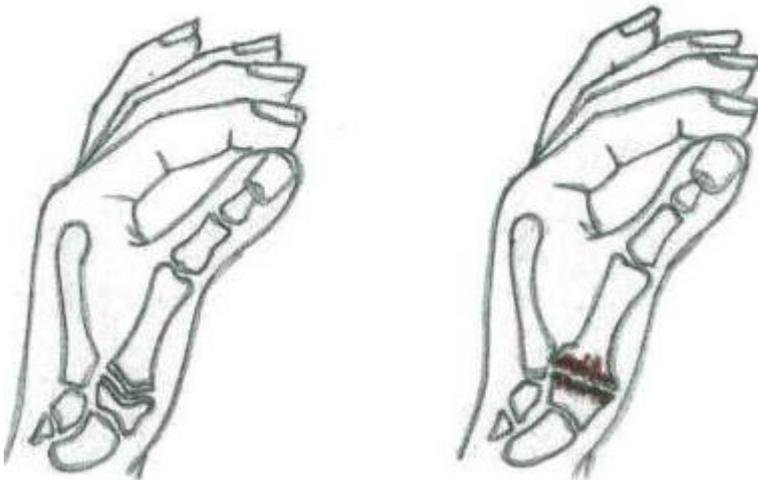
Base of Thumb Osteoarthritis

This booklet has been designed to provide you with information about your base of thumb arthritis. The joint affected is called the Carpometacarpal joint or CMC joint or the base of thumb joint. It also contains information about why you may experience pain, how you can manage your symptoms and what you can do to help yourself.

What Does Osteoarthritis (OA) Do to a Joint?

Osteoarthritis is a disease that affects your joints and is associated with wear and tear. The base of the thumb is very prone to OA because it has a wide range of movement, and works hard during most activities of the hand.

When OA develops in a joint the cartilage (the smooth lining of a joint) gradually thins and roughens. The bone underneath the cartilage starts to thicken and bony surfaces at the edge of the joints may start to grow outwards (known as 'spurs'). The joint may also become swollen and change shape and positioning.



**Normal
CMC Joint**

**Osteoarthritic
CMC Joint**

Because the joint can be painful, you may find yourself avoiding using your thumb which can cause the surrounding muscles to grow weaker.

What are the Symptoms?

- Pain in the CMC joint especially with pinching and gripping activities.
- Stiffness after rest.
- Swelling around the joint or a change in the shape of the joint may be present.
- Hand function can be impaired due to weakness and pain.

What Treatments Can I Use?

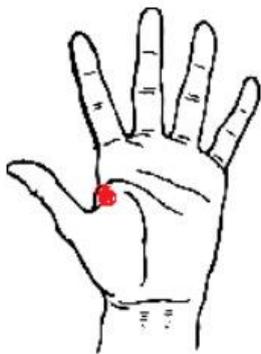
- Try applying a heat pack, wheatbag or hot water bottle to the area, or submerge your hands in safely hot water to relieve pain.
- You can also try a cold or ice pack, or a bag of frozen peas for 10 to 20 minutes. **Place a tea towel between the ice and your skin to protect from ice burns. Do not use ice if your sensation is impaired.**
- Discuss appropriate medication with your pharmacist or GP. They may recommend tablets or pain relieving gels to use.
- General thumb exercises and strengthening exercises are recommended, to keep the joint supple and build muscle stability around the joint (see below). This stability can help to reduce pain.
- A thumb splint that supports the CMCJ can be very useful. You can wear it during activities that normally cause pain, to reduce movement at the joint, and also for pain relief. We provide support splints, but they need to be fitted for size. Alternatively you can look in local pharmacies or online for 'Base of Thumb' or CMC joint supports.
- Joint protection is a process of reducing strain on your painful joint, by changing how you do certain activities (see below).
- Pacing: don't do all heavy activities at once, spread them out over your day or week to reduce the chance of flaring up your pain. Listen to your body and if it hurts – stop.
- See Versusarthritis.org for more ideas and further information.

What Exercises Can I Do?

Ideally you will do these exercises once or twice a day, and the aim is for them to be generally pain free. If you are getting some muscle ache or stretching that is ok, but if you are getting your usual joint pain or a sharp pain, you need to stop and check your technique.

Firstly, it can be helpful to start with submerging your hand in safely hot water for five minutes, to warm up and increase circulation.

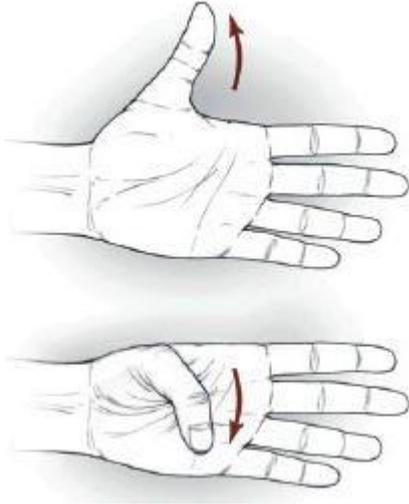
Secondly, gently massage and stretch out the muscle in the web space between the thumb and index finger. This muscle can get very tight and restrict thumb movement.



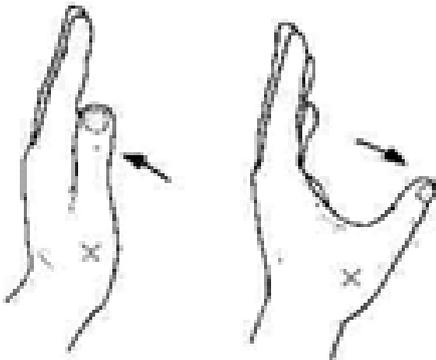
Tip: You can also try pinching this muscle between your thumb and finger for pain relief. Apply a firm pressure and hold for 10 to 30 seconds several times.

Increasing Your Range of Movement

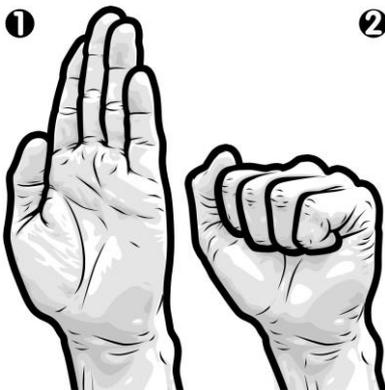
Start with 5 repetitions of each and build up to 10. You can be the judge of how often and how many exercises you do, depending on how your thumb feels.



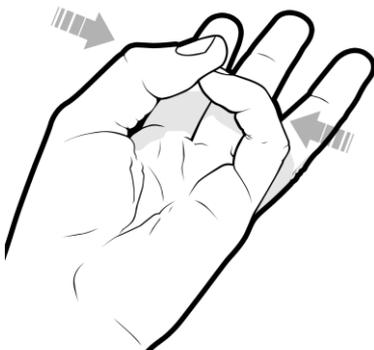
Thumb extension and flexion (up and down): Place the little finger side of your hand on a flat surface. Gently and slowly raise the thumb up towards the ceiling and back down towards the ground.



Thumb abduction and adduction (in and out): Keep your hand resting on the little finger side. Gently and slowly move your thumb out sideways and then back in towards your index finger.



Finger extension and flexion (straight and bend): Straighten your fingers and thumb completely, then bend into a fist. You can squeeze a soft exercise or stress ball, or a pair or balled up socks for added resistance.



Opposition (tip to tip): Slowly and gently touch the tip of your thumb to each finger, starting with the Index. Once you get to the little finger, try and slide the tip of your thumb down from the top to the base of the finger. This may be tricky.

Increasing Stability

If you are managing the above exercises without aggravating your pain, you can move on to building up stability. With these exercises you are making the muscles work harder. Again, start with a few repetitions and build up to 10.



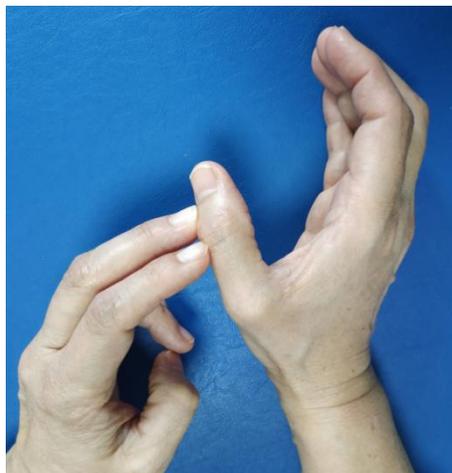
Thumb Opposition: Return to this position and try to make a round 'O' shape between your index finger and thumb. Once you have a good position press the tips together for 3 seconds and relax. Try not to let the 'O' shape collapse into a 'D' shape.



Resisted adduction (squeezing in): Bend your fingers at the big knuckles, but keep the rest of your fingers straight. Squeeze your thumb against the side of the index and hold for 3 seconds and release. Your thumb should stay straight or slightly bent during the movement, don't let it collapse in.



Resisted extension (pushing up): With your hand resting on the little finger side, raise the thumb to the ceiling, but this time use your other hand to resist or block the movement, push for 3 seconds to start with and build up to more within your pain limits.



Resisted abduction (pushing out): Staying in the same position, move your thumb outwards, and this time use your other hand to resist or block the movement, push for 3 seconds to start with and build up to more within your pain limits.