



TIMS Carpometacarpal Arthritis



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Osteoarthritis of the Carpometacarpal Thumb Joint

The thumb carpometacarpal (CMC) joint is where the metacarpal bone of the thumb attaches to the trapezium (carpal) bone of the wrist. It is sometimes called the 'basal' joint.

CMC (basal) joint arthritis

The thumb carpometacarpal joint (CMC) is where the metacarpal bone attaches to the trapezium (carpal) bone of the wrist. This is a common site for osteoarthritis of the hand due to the mobility of the joint and the large forces translated through the joint with use of the hand.

Who gets it?

OA 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. X-rays show it is present in 25% of women over the age of 55, but many people with arthritis at this joint have no significant pain.

Risk Factors

female gender
increased BMI
Age



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Common symptoms of CMC OA

Pain: Usually felt as a sharp or aching pain at the base of the thumb. The pain is usually worse during movement and relieved by rest.

If the Osteoarthritis progresses, pain may be present even during inactivity or rest.

Reduced strength: difficult to grip or pickup objects, turning keys in locks opening jars

Stiffness: Often following periods of rest (eg in mornings).

Reduced Range of motion. Loss of ability to move thumb away from hand

Swelling: Around the base of the thumb.

Altered Posture: Enlarged appearance and altered posture of the CMC joint; in the later stages may have a zig zag appearance (see diagram).

The following exercises, joint protection techniques and the use of assistive devices and splints described in this leaflet may help to relieve these symptoms and maintain range of motion

There is no substitute for using your thumb normally in daily function however you may find the following exercises helpful

Hand Exercises

There is no substitute for using your thumb normally in daily function however you may find the following exercises helpful

Always start with the Warm-Up Exercise. To warm up your hand place your hand in a bowl of warm water and gently move your thumb in a circular direction. After one minute you can then change the direction. Carry out these gentle moves for at least 2 minutes. This will help ease your hand and thumb into exercising. Can also relieve some of the stiffness first thing in the morning

Aim to complete the following exercises 1-2 times daily. They will help to reduce joint stiffness and maintain the range of movement of your thumb. It is not unusual to experience slight discomfort but aim to exercise within a comfortable and pain free range. If you find the exercises difficult or uncomfortable check that you are doing them correctly and reduce the number of repetitions. If you continue to experience any problems please contact the department.

When you do each exercise look carefully at the joints of your thumb. Make sure that your thumb does not bend backwards (or hyperextend) at the joints. Try to make sure that your thumb joints are kept a little bent (or flexed) as you do each exercise, as this will help protect your thumb.

[Video](#)



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Rest your arm and hand on a table on the little finger side so that your thumb is on top

Without help from the other hand lift your thumb upwards as far as possible. Hold for 5 seconds and repeat up to 5 times.

Make sure that your thumb joints keep bent (flexed) when you do this exercise. Try not to over extend any of the thumb joints.

[Video](#)



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Rest your arm and hand on a table on the little finger side so that your thumb is on top.

Keeping both joints of the thumb slightly bent, keep your thumb as far away from your palm as possible while lifting your thumb up toward the ceiling. Hold for 5 seconds and repeat up to 5 times.

Make sure that your thumb joints keep bent (flexed) when you do this exercise. Try not to over extend any of the thumb joints.

[Video](#)



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Place your elbow or back of your hand on a table. Put your thumb against each fingertip in turn making an 'O' shape. Make sure your thumb joints are always slightly bent (flexed).

[Video](#)



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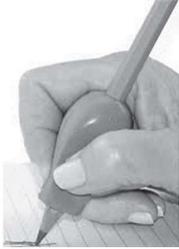
Place hand palm down on table and move your first (index) finger out to the side towards your thumb. This strengthens a muscle which is attached to the base of your thumb and helps to stabilise your joint. x5

Video



Touch the tip of your thumb to the base of your little finger and hold for 5 seconds. Repeat 5x

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The following are joint protection techniques that may help to reduce the pain you experience when doing activities and prevent further damage to the joints:

- Take notice of any pain you feel, it can serve as a warning that the way you are performing the activity is causing damage to the joint.
- Spread the load over several joints (eg by carrying items on two flat hands rather than gripping with your thumb).
- Use larger stronger joints rather than putting the strain through your thumb joints.
- Use less effort (eg push or slide heavy items rather than carrying).

Forexample:

- When doing activities that involve a pinch grip (eg writing) keep the top joint of the thumb bent and the wrist extended

Joint protection



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Most people find their own ways of doing activities that are less painful. It is important that you are aware of the activities that cause your thumb joint to be painful so that you know when to wear your splints and consider other ways to perform these activities that place less strain on the painful joints. Each time you experience thumb pain when doing an activity, stop and consider whether the way you are doing it is causing stress on the joint. Think about if there is another way the activity can be performed that is better for your joints.

Instead of holding a mug with one hand use two hands



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Shift not lift' - slide a plastic jug of water to the kettle only use as much water as needed

Hug large objects close to your body



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There are a variety of small aids that are available from mobility aid shops to assist you in maintaining your independence completing daily activities.

Wide grip cutlery:

Wide grip cutlery if you find it difficult or painful to hold cutlery.



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Plug pulls:

Assists grip if you have difficulty removing plugs.



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Tap turners:

Attach onto your taps to make them easier to turn on and off.



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Key turners

Key turners if you have difficulty turning key in a door.



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Jar twisters:

Jar twisters to help you open tight jars.



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Thumb splints

Splints are designed to be worn when doing activities that aggravate your thumb pain. They help to reduce the pain that you feel and protect the joint. It is important that you don't wear the splint for all activities as they can cause some of the muscles to become weak and the joint to get stiffer. Remember a healthy joint is a moving joint. Light functional activities should be completed without the splint. You should not wear the splint when driving or operating heavy machinery as it will restrict the movements of your hand.

In a recent randomised control trial additional splinting in patients with thumb based OA did not offer any additional benefits.

Thumbspica/splints can be bought in most chemists or on the internet.

Pain relief

Some people find that paracetamol, anti-inflammatory medications (such as aspirin and ibuprofen) can help their symptoms. People may find anti-inflammatory creams or gels particularly helpful in osteoarthritic joints of the hands thumb. . This should always be discussed with your GP or pharmacist as they will be able to recommend what type of pain relief and what dose is appropriate for you, depending upon any other medical conditions you have.

Cortisone Injection

Where symptoms are severe cortisone injections may provide temporary relief. Not everyone is suitable for an injection and it can weaken the capsule that is supporting the joint. Your GP or Physiotherapist will be able to advise

Surgery

If your symptoms cannot be adequately managed with the methods described in this booklet you may want to discuss the possibility of surgery with your consultant. Surgery should be avoided if symptoms can be managed with other methods

For further information

Please email ghnt.newcastlegatesheadtims@nhs.net, ring on **0191 2138800** or visit our website at: www.tims.nhs.uk which provides online guidance and support on managing your musculoskeletal (MSK) condition effectively.

The NHS website also provides trusted online information and guidance on all aspects of health and healthcare to help you manage your condition and/or inform your choices about your health: www.nhs.uk.

Useful links

The Patient Advice and Liaison Service (PALS) can offer on-the-spot advice and information about the NHS. You can contact them on freephone **0800 032 02 02** or e-mail northoftynepals@nhct.nhs.uk.



Tyneside Integrated Musculoskeletal Service

TIMS is a partnership between Newcastle upon Tyne Hospitals NHS Foundation Trust and Gateshead Health NHS Foundation Trust

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