

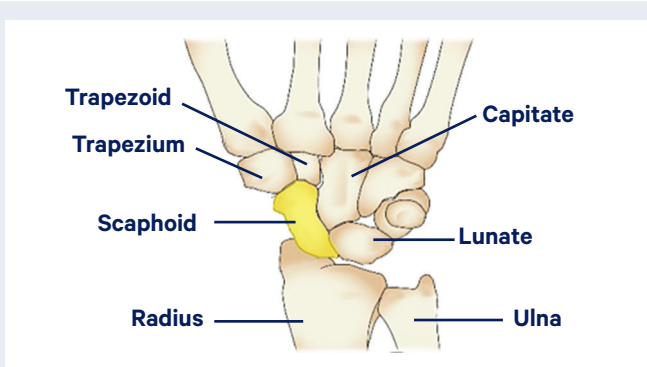
Osteoarthritis of the Joints of the Thumb (CMC and STT Arthritis)

WHAT IS OSTEOARTHRITIS OF THE CMC AND STT JOINTS OF THE THUMB?

Osteoarthritis has been called “joint wear and tear” or “degenerative” arthritis. Osteoarthritis can occur in any joint in the body but it commonly occurs in the hands and thumbs.



In healthy joints cartilage, a smooth tissue that covers the ends of the bones, acts as a shock absorber and provides a smooth surface between the bones to allow easy movement. When a joint develops osteoarthritis the cartilage thins and becomes rough. In some cases the cartilage breaks down, leaving the bones unprotected. The joint loses its ability to move smoothly. The bones lose shape and thicken at the end, producing bony spurs (or growths) and pieces of cartilage may break off and float around in the joint. This can disturb other tissues in the joint, causing pain and swelling.



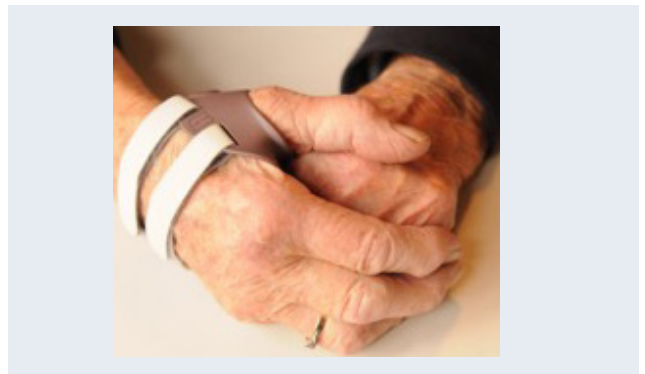
There are many factors that increase the risk of getting osteoarthritis including

- Age. Osteoarthritis usually starts in the late 40's or later and is uncommon in those under 40.
- Gender. Osteoarthritis is more common and worse in women, particularly in the knee and hand joints.
- Heredity. Osteoarthritis of the fingers and hands often runs in families, particularly in women.
- Joint injury. Hard repetitive physical activity may injure joints leading to osteoarthritis in later life. This explains why osteoarthritis is more common in people in some physically demanding jobs, such as builders.

The most common symptom of osteoarthritis of the carpometacarpal (CMC) joint or scapho-trapezium/trapezoid (STT) joint, is pain at the bottom of the thumb.

The pain can be worse with activities that require pinching, such as opening jars, turning door knobs or keys, and writing. If the arthritis progresses you may feel pain at rest and pain at night.

In more severe cases, the bottom of the thumb will be bigger and it looks like there is a bump at the bottom end of the thumb. This change can cause stiffness and weakness, making it hard to pick up small objects. The next joint above may compensate by loosening, causing it to bend further back (hyperextension).



HOW IS OSTEOARTHRITIS OF THE CMC AND STT JOINTS TREATED?

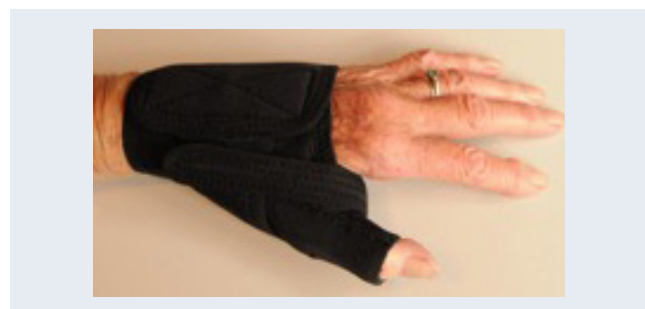
Hand Therapy

There is no cure for osteoarthritis, however there are many things you can do to reduce your symptoms and the impact of osteoarthritis on your life. The treatment for arthritis focuses on learning to manage it. Below are some ways you can do this.

Joint Protection

You can learn to take stress off your joints by the concept of the **4 P's**. When you need to complete day to day tasks first **Prioritise** which tasks are most important, then **Plan** your week to spread the tasks out. **Pace** each task by taking small breaks while doing them and finally look at your **Posture and Positioning** when doing the tasks.

You can make use of splints to take pressure off your thumb joints when using them. These can be rigid or soft supports and will depend on what your hand therapist decides will be most useful for you.





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You can also use equipment to help make the tasks easier. Your hand therapist can show you examples of these that you may find helpful.

Exercise

A properly designed exercise programme will not cause more damage to your joints but will reduce your pain and increase your flexibility of your thumb.

Your hand therapist can provide you with exercises that will strengthen and make your thumb more stable and increase your ability to carry out your activities of daily living.

Heat and Cold

Heat promotes blood circulation and can reduce pain and stiffness in a joint with arthritis. Having a hot shower in the morning or applying a warm wheat bag to your hand may help you get ready for the day ahead. If your joint is hot and swollen already, use a cold pack which can help reduce pain by reducing the blood flow to that area.

Medication

Painkillers are often recommended by your doctor or pharmacist to reduce pain and stiffness. However they do not treat the arthritis itself. Paracetamol is the simplest and safest painkiller and is usually recommended as the medication to try first. Never take more than the recommended or prescribed dose. If you require something stronger than paracetamol or have questions about pain relief options discuss this with your doctor or hand specialist.

Complementary Therapies

Research has shown that some complementary products and therapies can be helpful in managing symptoms of osteoarthritis. The role of glucosamine in the treatment of osteoarthritis has undergone lots of trials with mixed results. It is best to check with a registered complementary therapist, your doctor or specialist before starting any complementary product or therapy.

Injections

If pain killers and a splint aren't working effectively, your doctor might recommend injecting a long-acting corticosteroid into your thumb joint. Corticosteroid injections can offer temporary pain relief and reduce swelling inflammation.

Surgery

If damage to a joint is very bad, surgery to replace or repair the joint may be recommended. Options may include

- Joint fusion (arthrodesis). The bones in the affected joint are permanently fused. The fused joint can take weight and stress without pain, but has no flexibility.
- Osteotomy. The bones in the affected joint are repositioned to help correct deformities.
- Trapeziectomy. One of the bones in your thumb joint (trapezium) is taken out.
- Joint replacement (arthroplasty). All or part of the affected joint is removed and replaced with a graft from one of your tendons.

WHAT CAN I EXPECT FROM MY REHABILITATION?

Your hand therapist will provide you with education regarding how you can manage your arthritis for yourself at home. You might be given splints that you can wear to help prevent more stress on your joints. You should wear the splint while you are doing activities that you know make your joints sore.

After surgery, you can expect to wear a cast or splint over your thumb and wrist for up to six weeks. Once the cast is removed, your hand therapist can help you regain hand strength and movement.

Do

- Remember to wear your splint as you find helpful.
- Avoid or change the way you do the activities that bring on your symptoms.
- Rest between activities, especially if you are doing anything heavy or repetitive.
- Explore the best ways to manage your symptoms and use these regularly.

Do Not

- Do lots of forceful gripping at one time.
- Ignore your symptoms and pain, as these could get worse overtime if you do.

WHAT SHOULD I LOOK OUT FOR?

- Look out for activity that causes pain or swelling in your hand, try to avoid it, and tell your hand therapist.
- If your pain is getting worse you can return to your hand therapist or GP for a reassessment. If needed you can be referred to a hand surgeon to discuss other ways of managing your arthritis.
- If your splint is uncomfortable or rubbing book an appointment to see your hand therapist.

WHAT WILL HAPPEN IF I DO NOT HAVE TREATMENT?

Osteoarthritis is a degenerative disease that will continue to worsen over time. You can however slow down the degeneration and reduce the pain by managing the symptoms.



Merivale Hand Clinic

PHYSIOTHERAPISTS - OCCUPATIONAL THERAPISTS

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CONTACT DETAILS AND REFERENCES

Your hand therapist is _____

Merivale Hand Clinic (03) 3559775

www.arthritis.org.nz

www.healthnavigator.org.nz

www.arthritisresearchuk.org

www.rheumatology.org.au

Nelson, A. E., Allen, K. D., Golightly, Y. M., Goode, A. P., & Jordan, J. M. (2014, June). A systematic review of recommendations and guidelines for the management of osteoarthritis: The Chronic Osteoarthritis Management Initiative of the US Bone and Joint Initiative. In *Seminars in arthritis and rheumatism* (Vol. 43, No. 6, pp. 701-712). WB Saunders.

Zhang, W., Doherty, M., Leeb, B. F., Alekseeva, L., Arden, N. K., Bijlsma, J. W., ... & Kaklamanis, P. (2007). EULAR evidence based recommendations for the management of hand osteoarthritis: report of a Task Force of the EULAR Standing Committee for International Clinical Studies Including Therapeutics (ESCISIT). *Annals of the rheumatic diseases*, 66(3), 377-388.