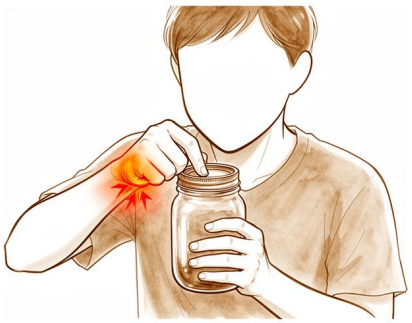
CQ HAND + UPPER LIMB
SPECIALIST ORTHOPAEDIC SURGEON

PATIENT INFORMATION — IN DEPTH

Basal Thumb Arthritis



Arthritis at the base of the thumb (the carpometacarpal joint).

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What you're feeling

You likely feel a deep ache at the base of your thumb. This is where your thumb meets your wrist. The pain often starts with daily tasks that require grip or pinch. Opening a jar, turning a key, or lifting a kettle can trigger sharp discomfort. You may notice the joint feels stiff, especially in the morning or after resting your hand.

The pain often worsens with activity. Simple movements like texting, buttoning a shirt, or holding a phone can become difficult. You might feel a grinding sensation or see slight swelling in the area. Over time, the joint may feel unstable, making it hard to hold objects securely. Some days are better than others, but the trend is usually toward increased stiffness and pain with use.

Nighttime pain is common. You may wake up because the thumb throbs or feels sore. This happens because the joint has been working hard all day. Even gentle pressure on the base of the thumb can be tender to touch. If you try to pinch something between your thumb and finger, the pain can be intense. This affects your ability to perform fine motor tasks, like picking up small items or writing for long periods.

We understand how frustrating these limitations can be. Your daily life relies on your hands, and this pain can interfere with simple routines. You are not alone in experiencing these symptoms. Many people with wear-and-tear arthritis at the base of the thumb notice similar patterns. The goal of treatment is to reduce this pain and help you regain strength for the tasks that matter to you.

What's actually happening

Your thumb joint is a saddle-shaped connection between your hand bone and your thumb bone. It allows your thumb to twist and pinch with precision. Over time, the smooth cartilage covering these bones wears away. This is wear-and-tear arthritis. Without this cushion, the bones rub directly against each other.

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This friction causes pain and stiffness. You may feel a grinding sensation when you grip objects. The joint can become unstable, making simple tasks like opening jars difficult. In many cases, the base of your thumb bone shifts out of place slightly. This subluxation puts extra stress on the surrounding ligaments. These strong bands of tissue hold the joint together. When they stretch or tear, the joint loses its stability.

In some injuries, the ligaments pull away from the bone with a small piece of tissue attached. This is called an avulsion. While complete dislocations are rare, partial shifts are common. The strongest ligament in this joint, the dorsoradial ligament, often bears the brunt of this stress. If it fails, the joint becomes loose.

Your surgeon looks at these structural changes to understand your pain. The goal is to restore stability and reduce friction. We may recommend surgery if rest and therapy do not help. Options include removing the worn bone or replacing the joint surface. The choice depends on your activity level and joint condition. We aim to relieve your pain while preserving enough movement for daily life.

What we can do about it

Dr Kieran Hirpara, an upper-limb surgeon at Mater Private Hospital Rockhampton, starts with the least invasive options that suit your condition. We begin with self-management and physiotherapy. You can use a stabilizing splint to support the joint. This reduces pain and improves hand function. It does not interfere with your pinch strength after four weeks of use. You may find the Hybrid splint offers modest but significantly greater pain relief than other types after this period. Physiotherapy aims to keep your thumb moving and strong. We usually recommend trying these non-operative measures for a few weeks to see if they help.

If simple measures are not enough, we discuss medical management. This includes pain medication and anti-inflammatories to control discomfort. We may also offer injections into the joint. Cortisone injections can reduce inflammation and pain for a limited time. Hyaluronic acid or PRP (platelet-rich plasma) injections are other options that aim to cushion the joint and promote healing. The effect of these injections varies from person to person. They provide temporary relief while you continue with therapy and activity changes.

Surgery is considered when conservative care has not given enough improvement or if your joint is extremely unstable. We remove the worn bone (trapeziectomy) to create space. We may reconstruct the ligaments using a tendon graft to maintain stability. For some patients, total joint replacement (arthroplasty) provides superior pain relief and greater improvement in function compared to bone removal alone. Arthrodesis (joining the bones) is reserved for younger, highly active individuals who need maximum pinch strength. We discuss the best option for your specific needs during a shared decision-making conversation.

What to expect

Your thumb pain and stiffness usually come from wear-and-tear arthritis at the base of the thumb. This condition tends to persist and slowly progress if left alone. It rarely settles on its own. Without treatment, you may find daily tasks like opening jars or turning keys increasingly difficult. Over time, the joint can become unstable, making grip strength weaker.

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If you choose non-surgical care, symptoms often fluctuate. You might have good days and bad days. However, the underlying wear does not reverse. Many people manage well for years with rest and splints, but the structural changes in the joint continue.

When you consider surgery, the outlook depends on the procedure chosen. We offer several options, including removing the worn bone (trapeziectomy) or replacing it with an implant. Most patients see significant pain relief and improved function. For example, total joint replacement often provides better strength and movement range at one year compared to simple bone removal. Other techniques, like using your own tendon to support the joint, have lower risks of needing further surgery.

Recovery is a process, not an instant fix. You will likely wear a splint for a period after surgery to protect the joint. Early movement is often encouraged to prevent stiffness, but heavy lifting is restricted initially. While some implants offer stronger pinch grip, they may carry a slightly higher risk of needing revision surgery later. Simple bone removal remains a reliable, long-lasting option with fewer complications.

Your surgeon will help you weigh these factors. The goal is to reduce pain and restore your ability to use your hand. Most patients return to normal daily activities within weeks to months, though full strength may take longer to build. There is no single "best" procedure for everyone. The right choice depends on your age, activity level, and how unstable the joint feels. We aim to give you a thumb that works well for your life, without making promises about perfect outcomes.

When to see someone

Ask for a specialist review if you have persistent pain at the base of your thumb that does not improve with rest. Seek help if you notice weakness, instability, or if your thumb locks or gives way. These symptoms can interfere with sleep or daily work. Sudden worsening of pain is also a reason to book an appointment. Early assessment helps determine if non-operative treatments like orthotics are suitable, or if surgical options such as trapeziectomy or ligament reconstruction are needed to restore function and reduce discomfort.

In more depth

This section goes further than you need for your own treatment decisions. Thumb base arthritis is worth the extra reading because it is the upper-limb condition where the gap between what patients are offered first and what the evidence supports is widest — and because the surgical options have never separated themselves from one another despite decades of trying.

THE NON-OPERATIVE EVIDENCE IS BETTER THAN ITS REPUTATION

Splints and hand therapy are often presented as what you do while waiting for surgery. A systematic review and network meta-analysis of **1,962** patients puts them on firmer ground: **multimodal treatment and hand exercises** reduced short-term pain and improved grip strength, while a **rigid CMC-MCP splint** — one that blocks the joint above as well as the thumb base — improved medium-term outcomes [1].

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Two details matter. The splint that worked crosses both joints, which is not the soft neoprene sleeve most people are given. And exercise improved *grip strength*, not merely comfort — this is a joint whose failure is mechanical, and strengthening the muscles that compress and stabilise it is treating the mechanism.

INJECTION BUYS WEEKS, NOT MONTHS

Corticosteroid injection is the usual next step. Pooling **673** patients, intra-articular corticosteroid injection produced **short-term improvement** but **no significant difference** in pain and functional outcomes at later follow-up [2].

That is worth hearing plainly. An injection here is a way to get through a defined period — a trip, a deadline, a busy stretch at work — or to confirm the joint is the pain source. It is not a treatment that changes the trajectory, and repeat injections chasing a durable result are chasing something the evidence does not show.

NO OPERATION HAS WON

Once surgery is on the table there are several credible options, and the striking thing is how similar their results are.

Arthrodesis — fusing the joint — produces good functional outcomes with low to moderate pain and disability scores, at the cost of a meaningful nonunion rate [3]. It trades movement for durability, which suits a heavy manual hand and suits a pianist badly.

Dual-mobility trapeziometacarpal arthroplasty — replacing the joint — showed improvements in strength, range of motion, pain, function and satisfaction across **1,421** patients, with a **13%** complication rate and a **0.6%** dislocation risk [4]. Those numbers are respectable, and they are also the reason implants remain a considered choice rather than the default: 13% is not small, and the follow-up in this literature is short relative to how long a thumb has to last.

The honest summary is that the choice turns on what your hand has to do, and on which failure mode you would rather risk — a joint that does not bend, or an implant that may need revisiting.

WHY THE THUMB IS SO OFTEN THE FIRST JOINT TO GO

The trapeziometacarpal joint is a saddle joint built for an unusual combination of mobility and load. Every pinch generates force at the thumb base many times the force at the fingertip, because of the lever arm. That is the price of opposability: the joint that makes the human hand useful is loaded harder, and more often, than any other small joint in the body — which is why it wears out first, and why strengthening what supports it is not a token measure.

REFERENCES

1. Thakker A, Ramchandani JP, Divall P, Sutton A, Johnson N, Dias J. What are the most clinically effective nonoperative interventions for thumb carpometacarpal osteoarthritis? A systematic review and network meta-analysis. Clin Orthop Relat Res. 2024;483(4):719-36.
2. Krez AN, Wu KA, Klifto KM, Pidgeon TS, Klifto CS, Ruch DS. Efficacy of intra-articular corticosteroid injection for nonsurgical management of thumb carpometacarpal osteoarthritis: a systematic review. J Hand Surg Am. 2024;49(6):511-25.
3. Dharamsi MS, Caudle K, Fares A, Dunn J. Arthrodesis for carpometacarpal joint arthritis: a systematic review. Hand (N Y). 2022;18(8):1284-90.

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4. Maling L, Rooney A. Outcomes of dual-mobility trapeziometacarpal arthroplasties: a systematic review. J Hand Surg Eur Vol. 2024;50(5):587-95.

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