

Carpal Fractures Other Than the Scaphoid

Ang pahinang ito ay isinalin ng makina at hindi pa nasusuri ng isang doktor. Ang **bersyong Ingles** ang siyang opisyal.

What you're feeling

These fractures usually happen from a fall onto an outstretched hand, or another sudden impact to the wrist. You might hear or feel a snap at the moment of injury. Straight away, the wrist is painful and swollen. Bruising often appears over the back of the wrist. If the small bones of the wrist have shifted out of place, the wrist may look visibly out of line, or even obviously deformed. Most people are reluctant to move the wrist, and gripping or pushing off the hand hurts.

The small bones of the wrist sit packed tightly together, so it can be hard to point to exactly where the pain is coming from. Pain is usually worse when you load the wrist, for example pushing yourself up from a chair, carrying shopping bags, or catching yourself on a handrail. Turning your wrist from side to side may also hurt.

In the first days and weeks, the pain can be there at night and with any movement. It gradually settles as healing begins. You may notice stiffness setting in if you keep the wrist completely still for long, which is one reason careful follow-up matters.

One thing worth knowing: these fractures are easy to miss early on. Plain wrist x-rays miss about half of them. So a normal x-ray does not rule out a fracture. If your doctor still suspects one, further scans such as a CT or MRI can find it, and sometimes the wrist is put in a splint and rechecked two weeks later.

The good news is that for most of these fractures, when they happen on their own and the bones have not shifted, healing goes well. The main risks of leaving them untreated are the bone failing to join, part of the bone losing its blood supply, and long-term wrist instability. That is why getting the diagnosis early matters.

What's actually happening

Your wrist is not one joint but a cluster of eight small bones, arranged in two rows, that link your forearm to your hand. When you fall onto an outstretched hand, the force funnels through this cluster. Depending on the direction of the force and how your wrist was bent at the moment of impact, one of these small bones can crack, or the ligaments holding the bones together can tear, or both.

Think of the wrist like a stack of building blocks held together with strong elastic bands. If one block cracks, the stack still stands but it hurts to lean on. If a band tears or a block shifts out of place, the stack becomes wobbly, and that wobbliness is what surgeons call instability. A shifted bone also changes how the whole wrist moves, which is why loading the hand or turning the wrist hurts so much right now.

Bone heals by knitting back together, the same way a broken stick knits if the ends are held still and lined up. Ligaments heal by scar tissue reattaching the torn ends. If the broken pieces sit in their normal position, a splint or cast often holds everything still long enough for this to happen. If the pieces have shifted apart, or the bone has lost its blood supply, the pieces may struggle to join, and surgery may be needed to hold them in place while they heal.

The bones in the back row of the wrist are held rigidly together, so a break there usually needs a lot of force. Some small bones have a patchy blood supply, which is why part of a bone can fail to heal even when the rest of the wrist recovers well. Your surgeon will match the treatment to the exact bone broken, whether the pieces have shifted, and whether any ligaments were torn at the same time.

What we can do about it

Dr Kieran Hirpara, an upper-limb surgeon at Mater Private Hospital Rockhampton, matches the treatment to your specific injury. Patients are generally referred to our clinic by their GP; if a physiotherapist has suggested you see us, you will still need a referral from your GP in order to be eligible for the Medicare rebate. At the clinic we take a history, examine your wrist, and arrange scans where they are needed to work out exactly which bone is broken and whether anything has shifted.

Many of these fractures are stable, or the pieces have barely moved. For those, we usually recommend holding the wrist still in a cast or splint while it heals. For some bones this means 4 to 6 weeks in a cast; for others, 3 to 6 weeks is enough. A few patterns need even less: some small tears where a ligament has pulled off a chip of bone are treated like a wrist sprain, with a splint for comfort and gentle stretching as comfort allows, to keep the wrist from stiffening. We keep an eye on healing with repeat imaging where it is useful, and your hand therapist brings movement back in stages once the bone is ready.

Surgery is recommended from the outset when the pieces have shifted apart, when the wrist is unstable, or when ligaments have torn badly enough that the bones will not stay lined up on their own. Some injuries, such as a dislocation with broken bones around it, need urgent realignment straight away. The aim of surgery is to put the bones back in their normal position and hold them there while they heal, so the wrist can move and bear load again afterwards. Sometimes there is a genuine choice: a fracture might heal in a cast, but the pain or the final position may not suit what you need from your wrist. We talk that through with you and decide together.

Whichever path you take, the first weeks are similar. Pain relief keeps you comfortable while the bone settles. You protect the wrist, keeping it still and avoiding load, so the pieces can knit without being disturbed. Swelling and stiffness in the fingers are common while the wrist is held still, so we get your hand therapy started at the right stage. After surgery, your rehabilitation is with Ruby Doolan at Extend Rehabilitation; she directs your

exercises and makes any splint you need. The goal throughout is the same: a wrist that heals solidly and moves well enough for the things you want to do.

What to expect

Healing starts well before you can see it on an x-ray. The bone usually knits together long before a scan shows it has joined, so a slow-looking x-ray does not always mean slow healing. Most of these fractures, when they happen on their own and the pieces have not shifted, heal well. In one reported case, a severe injury had healed completely with no sign of bone death or arthritis at 26 months.

The first weeks are about protecting the wrist. In a cast or splint, your job is to keep the wrist still and let the pieces knit. Fingers often feel stiff and swollen during this time. Once the bone is ready, hand therapy brings movement back in stages. Over the following weeks and months, loading the wrist gradually feels easier: pushing up from a chair, carrying shopping, turning the wrist side to side. The aim is a wrist that moves well and bears weight without pain.

For injuries that happen on their own, outcomes are generally good. Some athletes can even return to sport early, while others need longer treatment to avoid problems later. When other injuries came at the same time, such as torn ligaments or several broken bones, recovery is more involved and the risks are higher.

The main things that can go wrong are the bone failing to join, part of the bone losing its blood supply, and the wrist becoming unstable. These risks rise when diagnosis is delayed, which is why early scans and follow-up matter. A bone that fails to join can sometimes cause lasting disability if left alone. Stiffness is the other common setback, and steady therapy helps limit it.

Your surgeon will watch your healing with repeat imaging where it helps, and will tell you when it is safe to load the wrist, return to work, or go back to sport. If healing stalls or the pieces drift, treatment can be adjusted before the damage becomes permanent.

When to see someone

Seek urgent care if your wrist is obviously out of shape, if there is an open wound, if your fingers feel numb or tingly, or if you cannot use the hand at all. These signs need checking straight away.

Otherwise, start with your GP. These fractures are easy to miss, and a normal x-ray does not rule one out, as covered earlier. If your wrist pain is not settling, or if the swelling, movement or strength are not improving week on week as healing progresses, go back to your GP and ask whether a specialist review would help. Getting the diagnosis early matters, because delays raise the risk of the bone failing to join or the wrist becoming unstable.