

PIP Joint Fracture-Dislocation

What you're feeling

A PIP joint is the middle knuckle of your finger. A fracture-dislocation here means the knuckle has broken and the joint surfaces have slipped out of line. It usually happens when a ball or a fall forces the finger backwards or twists it while the finger is bent. You may feel or hear a pop at the moment of injury.

Straight away, the middle knuckle will be painful and swollen. The swelling is often mild to moderate at first. The finger may look crooked or twisted, and it may sit out of line with its neighbours. You will probably not want to bend or straighten it. Everyday things get hard fast: turning a key, doing up buttons, holding a cup, typing.

It is easy to assume this is just a jammed finger that will get better on its own, because most jammed fingers do. This injury is different. The broken piece of bone and the slipped joint need to be lined up early. If the joint stays out of line, the finger can stiffen into a fixed bent position, and getting the finger straight and moving again later becomes much harder. That is why this injury needs a proper check rather than waiting it out.

In the first days and weeks, the knuckle will hurt when you try to move it, and it may ache at night. The swelling and pain should gradually settle as healing starts. Your surgeon will also check the joints further along the finger, because the same fall can injure the end knuckle too.

Some warning signs need urgent care. Go to the emergency department the same day if your finger or hand turns pale, cold, white or blue, or if you suddenly lose feeling or movement in it after the injury. Go the same day if the skin over the injury is broken, if bone is showing, or if the finger looks clearly deformed. If your finger or hand becomes hot, red, swollen and painful, especially with a fever, go to the emergency department the same day.

What's actually happening

Your middle knuckle is where three things meet: the end of the finger bone nearest your palm, the base of the next bone along, and a soft cushion of tissue that stops the joint bending backwards. In this injury, the joint surfaces have slipped out of place and a piece of that second bone has broken off. Some of the soft tissue holding the joint together has torn as well.

Think of the joint like a hinge held steady by a strap underneath and two straps at the sides. When the finger is forced backwards, the strap underneath tears away from the bone, and the side straps can tear too. The hinge then slides out of its groove. When a chunk of bone breaks off with the strap, the hinge has nothing solid to rest on, so it will not stay lined up on its own.

The amount of broken bone matters a lot. If the break involves a small part of the joint surface, the joint can still be stable once it is lined up. If more of the surface is involved, the joint becomes unstable and will not hold its position without help. The size of the fragment, how far the joint has slipped, and which soft tissues are torn all shape what happens next.

Healing works differently for each tissue. Broken bone knits back together with new bone over weeks. Torn soft tissue scars down to the bone it tore away from, but only if it is held in the right position while that happens. If the joint is left out of line, the healing tissue sets in the wrong place, and the joint surfaces grind instead of gliding. Over time that wearing can leave the knuckle painful and stiff for good.

This is why getting the joint lined up early matters. Once the pieces are held where they belong, both bone and soft tissue have their chance to heal in a working position.

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. Some of these injuries heal without an operation, and others need surgery soon after the injury, so prompt assessment matters. 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 finger, and arrange imaging where it is needed. The scan shows how much of the joint surface is involved and whether the joint stays in place when it moves. That decides which path suits you.

If the break involves a small part of the joint surface and the joint is stable once lined up, we can often treat it without surgery. A splint holds the finger still while it heals. For some stable injuries, the splint sits on the back of the finger and stops the middle joint straightening fully while still letting it bend. Buddy taping, where the injured finger is taped to its neighbour, can also work for stable injuries and lets the finger keep moving early. We monitor healing with repeat imaging, and a hand therapist guides your return to movement at the right stage.

If more of the joint surface is broken, or the joint will not stay in place on its own, we recommend surgery from the outset. The aim is to hold the broken pieces and the joint in a working position so you can start moving early. There are several ways to do this, from wires through the skin to plates and screws, and the choice depends on your injury pattern and your needs. This is a shared decision, and we will talk through what each option means for you.

Whichever path you take, the first weeks look similar. Pain settles steadily as healing starts, and we will help you keep it comfortable. You protect the finger while the bone and soft tissue knit together. Hand therapy with Ruby Doolan at Extend Rehabilitation starts at the right stage, and Ruby makes any splint you need along the way.

CQ HAND + UPPER LIMB

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What to expect

Healing starts as soon as the joint is lined up and held there. Broken bone knits together over weeks, and torn soft tissue needs those same weeks held still before it scars down. Pain and swelling settle steadily during this time, though the knuckle will stay tender for a while and may ache after you use your hand.

The middle joint is naturally a stiff one after this kind of injury, and regaining bend takes months rather than days. Hand therapy with Ruby Doolan at Extend Rehabilitation starts at the right stage and guides your return to movement. Most people can manage light daily tasks early, such as writing, eating and typing, while heavier gripping and lifting come back later. When you can return to work depends on what your job involves, and sport waits until the joint is strong and moving well.

Outcomes vary with the injury and with how quickly it is treated. If treatment is delayed and the joint has stiffened into a fixed bent position, the outlook for full movement is worse, and releasing the tight tissues may be needed. Surgery aims to let you move early, and holding the joint firmly in place makes that possible. Some people are left with stiffness, a finger that does not fully straighten, or ongoing pain. A small number need further surgery, and arthritis can develop in the joint over time.

Watch the healing finger as you go. If your finger or hand becomes hot, red, swollen and painful, especially with a fever, go to the emergency department the same day. If symptoms are not settling, are getting worse over weeks, or stop you working or using your hand, see your GP or ask for a specialist review.

When to see someone

Seek urgent care if your finger looks clearly deformed, if the skin over the injury is broken, or if bone is showing. Go to the emergency department the same day if your finger or hand turns pale, cold, white or blue, or if you suddenly lose feeling or movement in it after the injury. The same applies if your finger or hand becomes hot, red, swollen and painful, especially with a fever.

For everything else, see your GP first. Ask for a specialist review if the pain is not settling, or if the swelling, movement or use of your finger are not improving week on week as healing progresses. This injury is easy to dismiss as a jammed finger, but waiting it out can let the joint stiffen into a fixed bent position. The sooner the joint is lined up, the better the outlook for movement.