

Intersection Syndrome

What you're feeling

Intersection syndrome causes pain and swelling on the **back and thumb side of your forearm**, a little way above the wrist – roughly a hand's breadth up from the bony bump on the back of your wrist. It is not pain in the wrist joint itself, but higher up, where the muscles of the forearm cross over one another.

The pain is usually worse when you **bend your wrist back** or move your thumb, and it often comes on after a spell of repetitive activity – rowing, weightlifting, racquet sports, gardening, or a lot of keyboard or wrist-heavy work. Many people notice **swelling** over the sore area, and some feel or even hear a soft **creaking, squeaking or grating** when they move the wrist, as if something is rubbing. This is sometimes called a “wet leather” sound.

What's actually happening

On the back of your forearm, two sets of muscles cross over one another like an X. One set runs out to your thumb; the other runs down to power the wrist. At the point where they cross – a few centimetres above the wrist – the tendons slide back and forth past each other inside their smooth sheaths.

When you do a lot of repetitive wrist movement, that crossing point gets **irritated and inflamed**. The lining of the tendon sheaths swells, friction builds up, and the tissues become tender and puffy – which is what causes the pain, the swelling and the creaking. It is an **overuse problem**, not an injury from a single accident, and importantly it is **not the same as de Quervain's**, a related thumb-side tendon problem that sits lower down, right at the wrist. Intersection syndrome sits higher.

The good news is that the irritated tissue settles down well once the rubbing stops, and the condition does not cause lasting damage in most people.

What we can do about it

Almost everyone gets better **without surgery**. The mainstays are:

- **Resting the aggravating activity** – the single most important step. Easing off the rowing, lifting or repetitive task for a few weeks lets the inflammation settle.

- **A wrist splint** that holds the wrist slightly bent back. This rests the crossing tendons and is often worn for a few weeks.
- **Anti-inflammatory tablets or gels** (NSAIDs) to calm the pain and swelling.
- **Ice** over the sore area after activity.

If things don't settle with those measures, a **corticosteroid injection** into the tendon compartment – often guided by ultrasound for accuracy – usually brings the inflammation down. For the small number of people whose symptoms keep returning despite all of this, a **minor operation** to release and clean out the irritated tendon sheath is very effective. It is rarely needed.

What to expect

Most people settle within a few weeks to a couple of months once they rest the activity and use a splint. The outlook is **excellent** – this is a condition that genuinely gets better, and it does not tend to leave any lasting weakness or stiffness once it has calmed down.

The main thing that brings it back is returning to the same heavy or repetitive activity too quickly, so easing back in gradually – and, where it applies, looking at technique or equipment (for example oar grip in rowers, or bar grip in the gym) – helps keep it away for good.

When to see someone

- Pain and swelling on the back of the forearm that **doesn't settle** after a couple of weeks of rest and a splint.
- A **creaking or squeaking** over the area, or pain that flares every time you go back to your sport or work task.
- Symptoms that keep **coming back** despite resting – worth assessing, as an ultrasound-guided injection may help.
- Any **fever, hot red skin, or rapidly worsening swelling** – see a doctor promptly, as that points to something other than simple overuse.