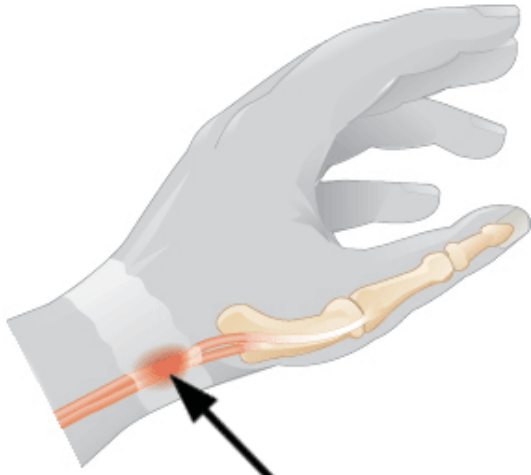


De Quervain's Tenosynovitis



Irritated tendons of the
extensor pollicis brevis &
abductor pollicis longus

De Quervain's Tenosynovitis is an irritation of the tendons that control thumb movements. It can be caused by an increase in repetitive movements or a direct blow to the area. It often affects new mothers, possibly due to hormonal changes making their tendons more vulnerable. The severity of the symptoms is variable, but this can affect normal daily activities and occasionally cause pain at night.

What are the Symptoms?

The signs and symptoms of De Quervain's tenosynovitis commonly present as the following:

- **Pain and tenderness over the outside of the thumb.**
- **Painful thumb movements.**
- **Pain on gripping and lifting activities.**
- **Sometimes a clicking or snapping feeling.**
- **Sometimes swelling of the tendon.**

How is the Diagnosis Made?

The description of the symptoms and a careful examination is usually enough to make a diagnosis.

Management

Splint

The usefulness of a splint will vary from person to person. During a flare up it may help to wear one, in order to rest and protect the tendon for a few weeks. As you start to feel better, you can reduce the time you wear the splint to just while doing difficult or painful activities. The splint will not protect you fully, so you still need to be careful whilst you are wearing it. The splint shouldn't be worn full time for long periods of time, as it will cause muscle weakness. The below splint is a thumb spica. There are larger, more protective splints available, if you feel you need more support. Look online or in a chemist.

Kinesiology Taping

Where repeated movement cannot be avoided taping can be helpful, but it should not be used in place of sensible rehabilitation. Care should be taken when using tape, as the skin can become sensitive to the glues in tape. *Remove carefully and immediately if you notice itching, redness, or any skin irritation.*

Pain Management Options

This is variable, not all options help everyone and they may only reduce pain levels by a percentage, but this can be good if it is affecting sleep.

- **Topical gels.** Ensure that the gel covers the area sufficiently according to the instructions and does not rub off on clothes.
- **Ice cube massage,** can give some relief even if short term. An ice cube can be massaged in a circular motion over the area of most pain. Apply the ice for 3-5 minutes up to 3 times per day.
As the ice melts it can make the skin feel like glass is cutting it and often patients stop to look at both the skin and ice cube to ensure there is no cause to harm.
You will notice a raised area of red skin will occur due to increased blood flow to the skin, these will reduce over time.
- **Oral analgesia (pain tablets such as paracetamol).** Some people prefer this option at night if the pain is disturbing them. The tablets can be bought over the counter. You should ask your local pharmacist for advice, especially if you take other medications. *Sometimes a mixture of tablets can be unsafe or reduce the effectiveness of a particular medication.*

Behaviour Modification

It is worth looking at activities that could be making your pain worse.

- **Pacing.** This means working out what level of a particular activity you can manage without flaring up your symptoms. It can involve a bit of trial and error. As a guide, if you get increased pain which lasts for more than 20 minutes after an activity, then reduce your activity time or break it up into shorter periods several times per day.
As your symptoms start to settle gradually increase your activity.
- **Ensuring your tools are right for the job.** For example, if you are gardening and are using secateurs when you should be using loppers or using loppers and should be using a saw.
- **Ensuring tools are sharpened.** Blunt tools will cause greater load on the hands and thumbs and possibly further irritation.

- **Grip widths.** Can you adapt your equipment safely to increase the size of the area you are gripping? For example wrapping handles with pipe insulation or racket tape. *This helps to reduce the traction on the tendon.*
- **Load.** Can you safely lessen the load you are moving or use a different technique? Try carrying a load closer to the body or using the elbows to create the movement rather than the wrist. As examples, with a toddler can you guide them to a level that is easier for you to lift, do you need to keep moving the baby seat in and out of the car, can you fill the kettle and pans less to reduce the weight you have to carry?
- **Using different utensils or gadgets** to reduce strain during daily activities. An ergonomically designed or vertical computer mouse can greatly improve positioning. Using a vegetable strainer means you don't have to lift a heavy pan of water. A wide gripped 'Y' shaped vegetable peeler reduces strain through the thumb. You can also consider buying pre-prepared vegetables or food during your recovery, to reduce the strain during food preparation.
- **Use your unaffected hand, for painful activities,** when possible and safe to do so. You can also use your affected hand to 'guide' and support, whilst your unaffected hand does the heavy work e.g when lifting the kettle or hoovering.

Exercises

Tendon pain often occurs because the stress on the tendon is more than it can cope with. Our bodies are good at adapting to increased load but they need to do it over time. Sudden changes in the amount or type of activity can be a trigger for tendon pain.

Once there is pain it is natural to avoid using the tendon, unfortunately this leads to gradually increasing weakness and loss of resilience making it harder and harder to return to normal. In combination with pain management, carefully managed exercises are important to rehabilitate the tendon.

There are two types:

- **Isometric - "no movement but contraction of the muscle against resistance."**
This allows tendon gliding within the tunnel and helps to increase the strength and resilience of the tendon. These can be particularly helpful when the pain is high and the tendon is easily aggravated.
Aim for a contraction which causes only mild discomfort which settles within 20 minutes of completing the exercise.
You can adjust the strength of the contraction, the number of repetitions or how often you do the exercise to try to find the right level or 'dose'.
- **Isotonic - "actively contracting the muscle causing the joint or joints to move."**
This allows greater movement of the tendon within the tunnel it passes, while strengthening.
Again aim to cause only mild discomfort that settles within 20 minutes of completing the exercise.
You can adjust the amount of movement, the number of repetitions or how often you do the exercise to try to find the right level or 'dose'. As the exercises get easier you can add resistance to make them harder.

- **Eccentric:** An eccentric exercise is the lowering part of the move, and involves working the muscles as they lengthen and stretch out, usually with some resistance added to make it more difficult. It should be a slow and controlled movement. Again aim to reproduce only mild discomfort that settles within 20 minutes of completing the exercise. You can adjust the amount of movement, the number of repetitions or how often you do the exercise to try to find the right level or 'dose'. As the exercises get easier you can add resistance to make them harder.

With all of the exercises the aim is to tap into the body's normal ability to adapt and get stronger. As with any exercise you need to gradually increase the dose to keep getting the benefits. Don't worry if you do cause a flare up. It can be tricky to find the right level. *Back off until the pain settles back to its previous level and try again more gently.*

How Long Will it Take to Get Better?

You will need to be patient because this takes time, often more than four weeks before there is any noticeable improvement. If the symptoms do not settle with conservative management within 3 months, a steroid injection may be offered, or if this fails then surgery may be considered.

See the exercise sheet provided or on our website.