What is De Quervain’s Syndrome?

The thumb plays a major role in hand function and it is therefore subject to an “over use” phenomenon. This is the most frequent cause of De Quervain’s Syndrome, a disorder of the extensor pollicis brevis and abductor pollicis longus tendons, which are located on the thumb side of the back of the hand.

Overlying these two tendons is a thin layer of connective tissue called a sheath. Thickening of the tendons and sheath from overuse results in pain, swelling, and limitation of thumb movement. The area over the thumb side of the wrist may feel tender and there may be a visible lump in the area. There is usually a constant ache which is aggravated by certain wrist and thumb movements, including sideways movement of the wrist, bending the thumb towards the palm, straightening the thumb, or moving the thumb away from the palm as if to grab a cup.

What causes De Quervain’s?

Some common causes are:

- overuse of the hand and wrist
- direct trauma (e.g., a blow to the thumb side of the wrist)
- ganglion formation
- abnormal tendon structure

In a number of cases, the cause is unknown DeQuervain’s Syndrome is also associated with:

- diabetes
- hyperuricemia
- thyroid disease
- pregnancy
- rheumatoid arthritis
What are the signs of De Quervain’s Syndrome?

- swelling over the radial styloid (on the thumb side of the wrist)
- pain with wrist and thumb movement
- sense of weakness with diminished grip and pinch strength
- limited thumb movement
- stiffness in the wrist / thumb

How is it treated?

Non-operative management

Initial treatment focuses on reduction of symptoms. These include:

- Splints to immobilise the thumb and wrist,
- avoidance of aggravating activities – these include forceful, sustained or repetitive thumb abduction with wrist ulnar deviation or wrist radial deviation with pinch (e.g. opening jars, using scissors, and doing needlework).
- Rest,
- Ice,
- Elevation and
- Compression bandaging help to reduce pain and swelling.
- Light hand use and gentle active thumb exercises help to prevent stiffness and loss of muscle strength.
- Modification of activities is required with equipment that minimizes wrist ulnar deviation and uses a power grip rather than a pinch grip (e.g. modified keyboard, tools with a pistol grip and a key holder).

Medical treatment may also include non-steroidal anti-inflammatory medication, and if symptoms persist, an injection of a steroid (e.g. Cortisone) may be administered. These medications may, however, have only a temporary result.

Operative management

If conservative treatment does not result in relief of symptoms, surgical decompression of the tendon compartment may be recommended. This involves an incision to release the pressure on the tendons. This is a relatively simple procedure with a low risk of side effects.