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# Tendonitis and Tenosynovitis

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## Introduction

Tendonitis means inflammation of a tendon. Tenosynovitis means inflammation of a tendon sheath - the synovium. These two conditions often occur together.

## What are tendons?

Tendons attach muscles to bones and allow the muscles to move the bones. For example, the tendons that you can see behind the knee come from the hamstring muscles in the thigh and move the knee. Some tendons are covered by a sheath called the synovium. Between the synovium and the tendon is a tiny amount of 'oily' fluid. This helps the tendon to move freely and pull on the bone it is attached to.

## What are the symptoms of tendonitis and tenosynovitis?

Pain, tenderness and swelling of the affected area of tendon are typical. The overlying skin may be warm. Any tendon of the body may be affected. However, tendons over the wrist, hand, shoulder ankle are most commonly affected. The inflammation may last just a few days. Sometimes it can last weeks or months if not treated.

Common tendonitis conditions include:

- Hand and wrist:
  - Trigger finger / trigger thumb
  - De Quervains syndrome
- Elbow
  - Tennis elbow
  - Golfers elbow
- Shoulder

	Rotator cuff tendonitis
	Biceps tendonitis
Hip	
	Adductor strain / Adductor tendonitis
Knee	
	Runners knee
	Illeo-tibial tract syndrome
	Patellar tendonitis
	Quadriceps tendonitis
Ankle	
	Achilles tendonitis
	Posterior tibialis tendonitis

### What is the cause of tendonitis and tenosynovitis?

- *Overuse* - of a tendon is the common cause. These conditions commonly occur around the wrist and overuse by lots of writing (writers cramp), typing, golf, tennis or running etc.
- *Arthritis* - can sometimes include inflammation of the tendon sheaths or tenosynovitis as well as the joints
- *Unknown* - many cases seem to occur for no apparent reason
- *Infection* - between the tendon and its sheath is a rare cause which requires urgent treatment.

### What is the treatment?

- **Rest** - is important to allow the inflammation to settle. Most commonly this involves stopping the repetitive activity which precipitated the condition. This may include reducing or modifying the activity (e.g.: stopping serving or overhead shots in tennis, badminton or squash).
- **A splint or support:** Sometimes a splint, firm bandage or brace may help (e.g. De Quervains tenosynovitis at the wrist). This enforces the hands and wrist to stay in the same position to allow rest of the affected tendon. For Achilles tendonitis an insole arch support or Orthotic helps support and elevate the ankle and often helps relieve Achilles tendonitis.
- *Ice packs* - over the affected area may ease swelling and pain, especially directly after exercise.
- *Anti-inflammatory painkillers* - are often prescribed (for example, ibuprofen). These ease pain and reduce the inflammation.
- *Physiotherapy* - may be advised. This is often helpful in stretching out tightened and contracted muscles in Achilles Tendonitis or Patellar tendonitis. Specific targeted muscle strengthening is essential in Rotator Cuff Tendonitis of the shoulder.
- *A steroid injection* - into the site of inflammation may be given if the above measures do not work. Steroids work by reducing local inflammation. It is usually effective, particularly in the short term. This is often used in the shoulder, wrist or hand. Steroid injection may cause degeneration of the tendon and possible tendon rupture and so is usually avoided in Patellar tendonitis and particularly Achilles tendonitis.
- *Surgical release of a tendon* – Most cases of tendonitis can generally be helped by the non-operative measures. However it is not uncommon that the symptoms persist and surgical intervention is required.

**Common Surgical procedures include:**

Hand and wrist:	Trigger finger / trigger thumb	Percutaneous Release (Ref: <a href="http://www.Ortho500.co.uk/patientinformation/triggerfinger">www.Ortho500.co.uk/patientinformation/triggerfinger</a> )
	De Quervains syndrome	Surgical release
Elbow	Tennis elbow	Common extensor release
Shoulder	Rotator cuff tendonitis	Arthroscopic Subacromial decompression
Knee	Patellar tendonitis	Arthroscopic Decompression (Ref: <a href="http://www.Ortho500.co.uk/patientinformation/patellartendonitis">www.Ortho500.co.uk/patientinformation/patellartendonitis</a> )
Ankle	Achilles tendonitis	Surgical decompression

The following may help prevent a recurrence once the condition has settled.

- Avoid repetitive motion and overuse of the affected area. This may be very difficult if your job involves repetitive movements. If it is a recurring problem then you should discuss this with your employer. A change of duties may be required.
- Exercises to strengthen the muscles around the affected tendon may help prevent a recurrence. It may be best to seek advice from a physiotherapist to find the best exercises to use.

[www.Ortho500.co.uk](http://www.Ortho500.co.uk) - patient information – Tendonitis and Tenosynovitis  
[www.Ortho500.co.uk/patientinformation/tendonitis](http://www.Ortho500.co.uk/patientinformation/tendonitis)

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