PHYSIOTHERAPY & SPORTS INJURY CENTRES

PSI Ottawa - 2571 Carling Ave., Suite 200, Ottawa **613-596-0167**
PSI Kanata – 99 Kakulu Rd., Suite 106, Kanata **613-591-8832**
PSI Nepean - 1 Centrepointe Dr., Suite 310, Nepean **613-723-6161**
PSI Sport Medicine West - 1000 Palladium Dr., Kanata **613-599-0299**
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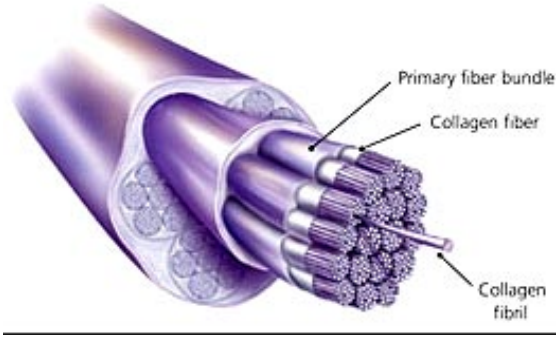
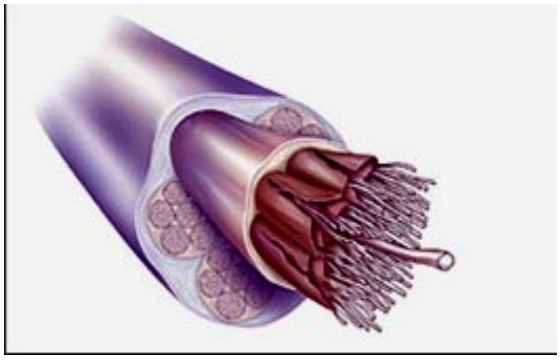
Tendonitis / tendinosis

A tendon is the thick fibrous cord that attaches muscle to bone. It transmits the power generated by a muscle contraction to move a bone.



Normal tendon



Damaged tendon. Note the collagen disorientation and fiber separation.

Tendonitis is when that tendon is inflamed or irritated. The most common site of a tendonitis is where the tendon joins the bone.

If the tendonitis fails to heal and the tendon itself starts to breakdown it is referred to as tendinosis.

How does tendonitis / tendinosis develop?

Tendonitis begins gradually and is a result of prolonged or repetitive type actions.

Everyday the tendons are subject to tiny 'micro injuries'. Tendonitis develops when these micro injuries develop at a rate faster than the body is able to repair them. Eventually, as these tiny injuries accumulate, the individual will start to feel some pain.

Initially, the pain will be felt only after the tendon is subject to the prolonged and/or repetitive activity that is aggravating it. Eventually though, if left untreated, the pain will start to develop earlier on in the activity, last longer after the activity is complete, and may even develop into a constant pain, even in the absence of the aggravating activity.

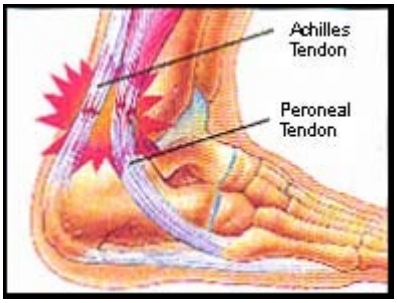
If the injured tendon is not allowed to heal properly, degeneration of the tendon will occur, i.e. tendinosis.

Usual symptoms include:

- Swelling of the tendon.
- Pain involved during the movement of muscles and tendon.
- Tenderness associated with the tendon.
- Local area of tenderness.

What physiotherapy can do to help

Tendonitis can be diagnosed by an assessment from your physiotherapist.



How is tendonitis treated?

The treatment involved is mainly to reduce the pain and inflammation. Resting is the easy way to help in recovery.

- ***Stretching***
  Stretching is vital to maintain good range of motion around a joint. If a patient has stiff joints, normal activities such as opening a jar or climbing stairs can be severely affected. By proper stretching, these functions can be preserved. After an injury or surgery, scar tissue forms, and soft-tissue contracts; this is when stretching is most important.

- ***Strengthening***
  Strengthening exercises are performed to help the patient improve the function of their muscles. The goal is to improve strength, increase endurance, and maintain or improve range of motion.

- ***Ice and Heat Therapy***
  Ice and heat are useful to warm up and cool off muscles. In addition, ice and heat can stimulate blood flow and decrease swelling. These can be important aspects of the therapeutic process.

- ***Electrical Modalities***
  Modalities such as ultrasound and acupuncture may be used to decrease inflammation and pain, and promote healing.

- ***Prevention***
  Every one of us knows that prevention is better than cure, so one should take certain precautions in avoiding tendonitis. To prevent tendonitis from returning here are a few prevention methods given:

  - Protection of the tendons. Protecting the tendons means people suffering from a certain tendonitis can protect the affected area, which gives them good relief. For example, a tennis elbow brace could be worn when shoveling snow or gardening to decrease discomfort.
  - Take breaks. Taking breaks in between or during activities will help in preventing inflammation of tendon. Any activity, for that matter, should not be carried out for longer periods.
  - Avoid repetitive motion and overuse of extremities.
  - Keep all muscles strong and flexible.

Sport Medicine Physician

Your sport medicine physician can also diagnose your tendonitis. If you are not improving with physiotherapy, other treatment options such as anti-inflammatory medications and cortisone injections are available. Your sport medicine physician can discuss the benefits and risks of these treatments with you. They can also order tests such as MRIs and x-rays. Such tests are not needed to diagnose tendonitis but are performed to find additional information, such as whether the swelling is due to any fracture.

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