Inflammation

Physiotherapy in Toronto for Injury Care

Inflammation is the important first stage of healing damaged tissues. Healing cannot occur until inflammation has come and gone. After an acute (new) injury it is important to begin treatment early so the inflammatory stage is kept to 24-48 hours, then the next stage of healing can begin.

Edema and swelling: What is the difference?
Edema and swelling are two terms to describe the same thing. It results from inflammation of tissues that have been damaged and increased blood circulation in the area.

Why does inflammation occur after an injury?
Immediately after an injury, the body floods the injured area with white blood cells and other cells to destroy bacteria and eat up dead or dying cells so that the repair process can begin. Swelling or edema, results from this flood of infection fighters. Normally, a system of vessels similar to arteries and veins called lymphatic vessels, drain the area of excess fluid and cells, but after an injury the lymphatics get blocked. The excess fluid and cells collect in the spaces between the tissues around the site of the injury. As more and more fluid and cells try to occupy a limited amount of space, they start to press on the surrounding tissues and this pressure is perceived as pain.

Are there different kinds of inflammation?

Generally, anything that ends in "ítis" means inflammation. Classic signs of inflammation include redness, heat, swelling, and pain. For example: tendonitis (tendon inflammation), bursitis (bursa inflammation), arthritis (joint inflammation), etc.

Even though these structures are different, they all swell in similar ways. Consequently, they can all be treated in similar ways.

Tendonitis

Tendonitis is inflammation of the muscle tendon or the connective tissue sheath that surrounds it. Tendons connect muscles to bone. When muscles are overused, or used in a way that they are not used to, the tendon sheath can become irritated which may lead to inflammation.

Scientific note: Tendonitis is a commonly used term but recent research suggests that often there is little or no inflammation present in the tendon itself and that the pain stems from the fraying or breakdown of the tissue. This condition is called tendonosis or tendonopathy and requires a different treatment approach than attempting to decrease inflammation.

Bursitis

Bursitis is the inflammation of the bursae. Bursae are small, fibrous sacs of fluid that are usually found around joints. They reduce friction between bones, ligaments and tendons. When they get irritates they become inflamed and produce more fluid. Bursitis is different from edema, because the fluid is contained in the bursa and not spread throughout the tissues. Bursitis can still be painful, as the enlarged bursae can compress the surrounding tissues leading to pain. Bursitis can be treated with ice, anti-inflammatory

medication, and exercise just like edema.

Arthritis

Arthritis is inflammation in a joint. The insides of joints are lined with a special tissue called synovium. The synovium produces a fluid that acts like oil within a joint to keep the joint surfaces lubricated. When the joint surfaces get irritated, the synovium becomes inflamed and produces more fluid. Excess synovial fluid is like bursitis in that it is enclosed with the joint capsule. It can cause pain and can be treated much the same as bursitis.

How can CanadaPhysio help?

Your physiotherapist at CanadaPhysio can help you to manage your injury, reduce the pain and swelling associated with acute injures, and can give you exercises to increase strength, and restore mobility and function. Exercise plays an important role in the recovery process. Exercise helps to maintain the motion at the injured area, promotes fluid reabsorption and prevents stiffening of joints. Your physiotherapist can also educate you on returning to work and ergonomics, and can help develop progressive exercise programs aimed at work conditioning.

When should I see the doctor?

You should see your doctor after injury if:

- the joint is painful or swollen and you are unable to put weight through it
- you can feel something moving abnormally within a joint
- the joint feels unstable or wobbly
- there is no response to PEACE & LOVE and MEAT
- there is persistent weakness or instability
- you have numbness or tingling as a result of the injury
- you are a child or adolescent

A serious injury may deceive you by not being very painful initially. Also, a mild injury may lead to something worse if not properly treated. If in doubt, get it checked out.