

healthier YOU

your healthy living newsletter



Knee Arthritis

What conservative treatments may I need?

You have been active most of your life, but now the effects of playing football, rugby, skiing and running up and down

stairs have started to take their toll. Lately, you've been sensing morning stiffness in the knees and have noted pain with running, walking and going up and down stairs. It's possible you may have Osteoarthritis. The most common cause of these symptoms as we get older is the onset of osteoarthritis (OA).

What is osteoarthritis?

The term "**osteo**" means bone, "**arth**" means joint and finally, "**itis**" means inflammation. So you put it together and it means "**bone and joint inflammation**".

There is cartilage in the knee that covers the contact points of the bone that make up the knee joint (the femur [thigh bone] and tibia [shin bone]). The role of the cartilage is to serve as a resilient but elastic structure that reduces the compression and shear (gliding) stress between the bones. There is unfortunately very little capacity for the cartilage to heal once an injury has occurred because the tissue is designed for longevity through maintenance, not repair. The cartilage typically has a poor blood supply so damaged cartilage repair is challenging.

There are several treatment options for knee arthritis:

- Get a professional assessment from your doctor or physiotherapist.
- Consult your physician or pharmacist regarding anti-inflammatory medication.
- Glucosamine sulfate and Chondroitin are both components of cartilage that are thought to help slow the progression of arthritis.
- Physical Therapy treatment has been shown to be very effective in relieving pain and increasing function.
- Some clinicians believe that custom foot orthotics and knee bracing can be effective in altering the way the joint surfaces compress.



There is no cure for OA but many treatment options exist. Conservative (non-surgical) treatments can be used individually or in combination with each other to provide effective symptom relief. If these fail, surgical interventions are the next step and these will be discussed in next month's issue.

Getting Fit

Part III

In the final part of our three part series, we will cover flexibility. Flexibility is important for maintaining full mobility in the joints throughout our body. The right amount of flexibility has also been shown to help improve athletic performance and reduce the risk of injury.

There are two ways of increasing your flexibility:

- **Static Stretches:** The muscle is held in a stretched position.
- **Dynamic Stretches:** The muscle is moved in and out of the stretch repeatedly.

Static Stretches should be held for 10-30 seconds at a point of gentle tension but no pain in the muscle.

Dynamic Stretches should be done gently as they can pose a greater risk of muscle injury if done improperly. Examples of these kind of stretches are rolling the head towards one shoulder and then slowly back towards the opposite shoulder. They should be done continuously for 30 seconds and be pain-free.

The key muscles to stretch vary from one person to the next, but most should include stretching for the back and front of the **thigh**, the **calf muscles**, the **back** and **neck** as well as the **shoulders**.

Stretches are best performed after a warm-up activity and not before your activity.

Consult your health care provider to make sure you're performing the stretch correctly.



Tennis Elbow: What is it and how is it treated?

The medical term for tennis elbow is '**lateral epicondylitis**'. The lateral epicondyle is an outcropping of bone on the outside of the elbow where some of the muscles that straighten the wrist attach. When these muscles are injured this bony attachment site often becomes painful with gripping movements.

Those who work in settings that require repetitive manual tasks have a higher chance of acquiring tennis elbow. It is regarded as an overuse injury that is difficult to treat, and may last as long as 48 months.

When tennis elbow becomes chronic (usually lasting longer than 3 months) the pain people feel becomes less due to tissue inflammation and more related to degeneration of the muscle and tendon. In addition to the muscle damage, nerve irritation may also occur, increasing the pain level in the area.

Physical Therapy can help with relieving pain and restoration of muscle.

- Pain-free therapeutic exercise can be used to restore muscle impairment.
- Work-specific treatment to allow the patient to return to work.
- Treatment options in addition to exercise may involve manual therapy such as deep tissue massage, mobilizing stiff joints, and acupuncture.
- The longer the injury has been going on the more difficult it is to treat. Therefore it is crucial that if pain or muscle weakness become apparent in the elbow, seek treatment early.

Depending on the cause of your injury and how your body has been compensating since the symptoms began, your Physical Therapist may also treat your neck and shoulder region as well. There are several muscles and nerves in these areas that may refer pain to the lateral epicondyle.

Education on proper lifting, stretches and icing the region is vitally important. Ergonomic concerns need to be addressed in order to stop the actions and postural positions that may be pre-loading the elbow region.

With perseverance, focused treatment, and patience, the nasty affliction of tennis elbow can be delt with and you can get back on the courts, or back to work.



Backpacks for Kids

We've all witnessed a small child bent over under the load of a backpack half their weight as they waddle down the sidewalk. A child's spine, unlike adults, is composed of much more cartilage rather than bone, making it less able to withstand heavy loads.

Here are some guidelines for making the right choices for kids.

- It's recommend that no more than 10-15% of the child's body weight should be in a backpack.
- Loads carried low in the pack, near the hips place much less strain on the back.
- Choose smaller backpacks when possible.
- Rolling bags present good options for some children as long as they do not have to lift the bag repeatedly over obstacles.
- Encourage your child to wear the backpack straps over both shoulders and not just one.

Most backpack related ER visits are not caused by wearing them but instead by swinging the packs around.



The Spectacles of Summer

One of the joys of summer is watching the fierce lightning storms that are common across Canada with the warmer months. **Lightning strikes the ground about 8 million times per day around the world**, according to 2005 research study.

Here's how to enjoy the spectacle without the risk:

- ⚡ Stay inside or in an insulated vehicle
- ⚡ If outside, avoid tall objects, open spaces and water
- ⚡ Don't touch metal – a U.S. study found that 60% of lightning victims were touching a metal item when they were hit
- ⚡ Just because there's no rain doesn't mean there's no lightning. A Florida study found that 21% of lightning deaths occurred when the ground was dry
- ⚡ If there is less than 30 seconds between a lightning flash and the thunder, you are at risk. Therefore you should stay inside for at least 30 minutes after the last thunderclap.

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Coming up in our next issue:

Knee Arthritis: Surgical Intervention
Cycling

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If you have a pre-existing medical condition/injury or are in pain, please consult you health care professional prior to changing your diet or commencing any exercise.

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