



September 2014

# Newsletter

## INSIDE THIS MONTH

- ACL
- Pinched Nerves

## Anterior Cruciate Ligament (ACL) Injury

The ACL is one of four major ligaments that provide stability to the knee joint. Injuries to the Anterior Cruciate Ligament (ACL) are one of the most common injuries in the knee.



### Anterior Cruciate Ligament (ACL) Injury Prevention/Reduction

- To prevent injury, athletes need to practice proper form and develop body awareness, strength, and balance to support knees and ankles.
- Warm up stretch before games and practice.
- Perform a variety of drills (eg. FIFA-11 exercises) until the movements are second nature.
- Improving flexibility, strength (particularly of the core, gluteus medius and hamstrings), balance, agility, and your ability to jump and land safely.

### What Causes an ACL Injury?

ACL injuries are common in sports that involve sudden changes of direction (e.g. Soccer and Basketball). Most occur during maneuvers such as pivoting or when landing from a jump. Factors contributing to ACL injuries include:

- Ground resistance
- Cleat type.
- Hormone levels (between genders) on ligament strength
- Stiffness and fatigue of the ligaments
- Muscle imbalances (e.g. quads much stronger than hamstrings)
- Poor neuromuscular control



## What are symptoms and signs of a torn ACL?

With an acute injury, the patient often describes that they heard a loud pop followed by intense pain in the knee. The pain makes walking or weight-bearing very difficult. The knee joint will begin to swell because of bleeding within the joint, making it difficult to straighten the knee.

## What is the treatment for a torn ACL?

The decision of how the injury will be treated depends in part on the patient's level of activity before injury, what the patient expects to do after the injury has healed, the general health of the patient, and whether the patient is willing to undertake the significant physical therapy and rehabilitation required if surgery is necessary.

Nonsurgical treatment may be appropriate for patients who are less active, do not participate in activities that require running, jumping, or pivoting, and who would be interested in physical therapy to return range of motion and strength to match the uninjured leg. Some patients might benefit from arthroscopic surgery to address associated cartilage damage and to trim arthritic bony changes within the knee. Recovery from this type of arthroscopic surgery is measured in weeks, not months.

Many patients opt to have their ACL repaired surgically. This most commonly involves using part of the hamstring or patellar tendon to create a new ACL. After surgery, patients do extensive physical therapy. They can generally return to pivoting sports six months after surgery.



# Pinched Nerves

## Alternative treatment instead of surgery

Cervical Radiculopathy refers to a pinching or inflammation of a cervical nerve from its exit point in the spine. Some studies have shown that a pinched nerve usually improves with time without the need for surgery, but through Physical Therapy. Patients that have not responded to physical therapy and oral medications may experience significant benefits from steroid injections. Below are a few non surgical treatment options that may be prescribed through your Physician.

### **Rest and relaxation:**

It may be important to refrain from repetitive movements before your prescribed treatment is complete.

### **Physical therapy:**

The physical therapist can administer a course of treatment to alleviate pain and relax the nerves.

### **Epidural steroid injection treatment:**

Steroid injection may benefit patients who would otherwise suffer with the kind of lasting pain that would sometimes necessitate surgical treatment. The procedure can be performed in an outpatient setting. A trained specialist will use an MRI scan and physical exam to identify to suspected area of injury.

The membrane covering the spine and nerve roots is called the dura. The space surrounding the dura is the epidural space. An epidural injection places anti-inflammatory medicine into the epidural space to decrease inflammation of the nerve roots, reducing pain and hopefully aiding the healing process. It may provide permanent relief or pain relief for several months while the injury/cause is healing.

Improvement may occur immediately or within two weeks or even after one injection. Most patients will benefit from a gradual exercise performed simultaneously with the supervision of a physical therapist.