

SPORTS INJURIES

Athletes of all kinds, whether they are active for recreational purposes or with more competitive or professional goals in mind, can be at risk for lower limb injuries. These injuries may be caused by overuse, accidents, training or equipment errors. Common sport injuries of the lower limbs may include:

ACHILLES TENDONITIS

Symptoms

- Pain generally develops gradually
- Pain, swelling, and possible nodule formation along the tendon or where it is attached to the back of the calcaneus
- Stiffness may be present after sitting or resting
- It is most painful when patients use their strong calf muscle or go up on their toes

What is it?

It is an inflammation of the Achilles tendon which is just above the heel on the back of the leg.

TIBIALIS POSTERIOR TENDONITIS

Symptoms

- Pain and possible swelling may be noted along the path of the tendon during activity
- Pain is located posterior to the medial malleolus of the ankle and along the tendon's path to the insertion point on the navicular
- Patients frequently describe pain on the inside aspect of the foot and ankle

What is it?

It is an inflammation of the tibialis posterior tendon that wraps around the posterior aspect of the medial malleolus due to excessive traction or strain on the tendon when the foot pronates excessively.

MEDIAL TIBIAL STRESS SYNDROME

Symptoms

- Pain is usually noted along the middle and distal thirds of the posteromedial tibia
- Initially, pain subsides with rest from the aggravating activity
- In more chronic stages, the pain can be experienced during all weight-bearing daily activity and can be very tender to touch

What is it?

This condition is a more specific term for the commonly used general term of shin splints. It is stress/strain along the middle and distal thirds of the posteromedial tibia where the muscle attaches to the bone.

EXERTIONAL COMPARTMENT SYNDROME

Symptoms

- Chronic cases are usually characterized by a gradual onset of aching leg pain and fullness over the involved compartments
- Acute cases are characterized by intense pain and swelling in the affected compartment
- Weakness and paresthesia may accompany the pain; these are related to ischemic changes within the compartment
- Physical examination may appear normal unless the patient has recently exercised
- There will be no tenderness over the distal medial tibia as in medial tibial stress syndrome

What is it?

Pain and swelling in exertional compartment syndrome is thought to be caused by increased intracompartmental pressures possibly produced by swelling within the compartments of the lower leg.

PATELLOFEMORAL PAIN SYNDROME (PFPS)

Symptoms

- Pain is experienced under or around the patella with activity, climbing stairs (especially going down stairs), and prolonged sitting

What is it?

PFPS is a tracking disorder where the patella is not moving in the proper groove on the femur.

ILIOTIBIAL BAND FRICTION SYNDROME (ITBFS)

Symptoms

- Pain is experienced on the lateral aspect of the knee or thigh and usually occurs at a certain mileage for a runner or cyclist

What is it?

ITBFS is an overuse injury to the tissue on the outside of the thigh that extends from the hip and inserts on the lateral condyle of the tibia.

PEDORTHIC POINTERS FOR PATIENTS

Sports injuries can often be a result of poor training techniques combined with poor lower limb mechanics (how the foot moves) and inappropriate footwear. To prevent and alleviate pain caused by sports injuries, Canadian Certified Pedorthists recommend:

- Slowly and carefully increasing activity while allowing the tissues of the lower limb the time to properly adapt to new activity levels
- When injuries occur, custom orthoses and appropriate footwear choices may help the healing process and stop the recurrence of problems
- Selecting a stable shoe with a sturdy heel counter (the back of a shoe) that controls motion and/or provides shock absorption as needed
- Over-the-counter devices can often prevent simple cases of overpronation and assist with healing
- If a foot injury occurs rest it and use ice or heat |
- If a condition persists it can help to visit a referring health professional, such as a physiotherapist or massage therapist, who specializes in sports medicine