

14 nagging foot injuries to beat

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You probably take them for granted, but a healthy pair of feet is a runner's best friend. The average runner's feet hit the ground 2,400 times per kilometer. With each stride, your foot absorbs a force several times your body weight, they land, roll forward and push off. Over and over and over again.

To help protect your feet, I've listed 14 most common foot problems.

Athletes' Foot

Have you ever wondered why your feet often itch or become scaly in appearance? If you have, you may be suffering from a fungal skin infection. Fungus commonly attacks the feet because shoes create a warm, dark, and humid environment which encourages fungus growth. The warmth and dampness of areas around swimming pools, showers, and locker rooms, are also breeding grounds for fungi.

The fungus causes redness, cracking, itching and sometimes blisters between the toes. Drying feet thoroughly, wearing protective flip flops in the shower room, and applying talcum powder regularly can help prevent the fungus from spreading. In many cases a prescription topical medication is necessary to cure the infection.

However, not all fungal conditions are athletes' foot. Other conditions, such as disturbances of the sweat mechanism reaction to dyes or adhesives in shoes, eczema, and psoriasis, may also mimic a fungal infection. So how do you know if you have a fungal skin infection?

The signs and symptoms of a fungal skin infection can occur singly or in combination:

- Drying skin
- Itching
- Scaling
- Inflammation
- Blistering

Blisters often lead to cracking of the skin. When blisters break, small raw areas of tissue are exposed, causing pain and swelling. Itching and burning may increase as the infection spreads. Fungal skin infections may spread to other parts of the body, notably the groin and underarms, by those who scratch the infection and then touch these areas of the body. The organism causing athlete's foot may persist for long periods of time. Consequently, the infection may be spread by contaminated bed sheets or clothing to other parts of the body.

Quick tips for prevention of a fungal skin infection:

- Practice good foot hygiene
- Avoid walking barefoot; use shower shoes or Crocs
- Wear light and airy shoes
- Wear socks that keep your feet dry, and change them frequently if you perspire heavily.

In an apparent fungus condition does not respond to proper foot hygiene and self care, and there is no improvement within two weeks, consult our office and we will determine if a fungus is the cause of the problem.

Claw/Hammer Toes

What is it?

- Hammertoe is the general term used to describe an abnormal contraction or "buckling" of the toe because of a partial or complete dislocation of one of the joints of the toe. As the toe becomes deformed, it rubs against the shoe and the irritation causes the body to build up more and thicker skin to help protect the area. The common name for the thicker skin is a corn. At first, this thick skin helps reduce irritation to the bone prominence, but as the skin becomes thicker it adds to the pressure from the shoe. Periodic trimming of the corn may give temporary relief. However, over a period of time, a bursa may

develop and if it becomes inflamed (bursitis) the area becomes red, swollen and painful. It may also become infected. Do not confuse corns with calluses that occur on the bottom of the feet. They are generally caused by other conditions, although a severe hammertoe may create downward pressure on a metatarsal bone at the ball of the foot, and add to the cause of a callus.

How did this happen?

- Although there is little doubt shoes are responsible for causing corns, the size, shape and other characteristics of our feet are hereditary. The contraction and/or rotation of toes can be the result of poor mechanics of the foot, resulting in over pronation. This results in low or flat arches, which causes the muscles and tendons of the foot to twist the toes and joints away from their normal position. High arched feet (over supination) can also result in similar conditions by increasing the contracture of the tendons.

What can I do for it?

- The most important thing is to purchase well fitted, comfortable, low heeled shoes that do not irritate the crooked toe. Also, make sure your stockings are not tight, causing the toes to contract. High heel shoes should be worn at a minimum, as they cause the tendons of the toes to pull them up into a contracted position.
- Tennis and walking shoes have significantly decreased the complaint of many people with hammertoe deformities. Although the crooked toe is still present, it may not hurt if the shoe is large enough.

How does the Chiropodist treat it?

- Your chiropodist will examine your feet to determine the cause of the and rule out other medical conditions. Treatment may range from more appropriate footwear to periodic trimming and padding of the corn. Antibiotics may be used in the presence of infection. Removable silicone toe pads may be made for you to alleviate pressure.
- A custom made orthotic may also be made for you to help minimize the effects of a flat foot or a high arched foot. Orthotics does not make the hammertoe or corns disappear, but may slow down or arrest the "buckling" process.

If conservative treatment is unsuccessful, surgical intervention may be suggested. In the early stages, when the toe joints are flexible, this may involve a minor procedure, such as cutting or lengthening the tendons to straighten the toe. In later, fixed stages, realignment of the bones is usually indicated.

Ingrown Toenails

This condition occurs when the edge of the toenail is driven into the toe by shoes (or boots) that are too tight. The nail cuts into the side of the toe, creating a shooting pain as it puts pressure on the nerves. Nails should be trimmed often and allowed to overhang slightly beyond the skin of the toe. Too long or too short nails can start to grow inward. Cut nails parallel to the shape of your toe.

What is it?

- An ingrown toenail is a condition in which the edges of the nail grow into the surrounding skin.

What does it look like?

- The area is usually red and may be warm; if not treated, it is prone to infection. If infected, the area becomes painful, red, and swollen and pus-filled blisters may develop.

How do you treat it?

- Mildly ingrown toenails can be trimmed away, the free edge gently lifted, and sterile cotton placed under the nail until the swelling goes away.
- A simple in office nail surgery procedure can eliminate this problem, in which the offending section of the nail is removed. The ingrown nail usually does not recur after a nail surgery.

How do you prevent it?

- Proper fitting footwear with enough room in the toe area of the shoe or boot. Trimming your toenails straight across, not curved at the edge of the toenail.

Blackened Toenail (Sub-Ungual Hematoma or Bleeding Under the Nail)

This is a common injury to tennis, soccer players, and runners. It is due to impaction of the 1st toe or the longest toe against the upper of the shoe. Blood from ruptured capillaries collect under the toe nail plate causing pressure and pain. Treatment is required to allow blood to escape and so relieve the pain. A chiropodist can easily treat this painful condition. The best way to prevent black toenails is to wear shoes that fit properly. The toe box should be wide enough so your toes don't bump against the shoe. You should have about ½" of space between the end of your longest toe and the top of your shoe. Blister-free socks may help to prevent friction.

Thickened Toenail (Onychauxis)

What is it?

- Onychauxis is a thickening (hypertrophy) of the nail plate.
- Onychogryphosis is long-standing thickening, in which typically a curved hooked nail (ram's horn nail) occurs.

What does it look like?

- The nail appears thicker and more yellow.

How do you treat it?

- A chiropodist can use a special hand drill, to reduce the thickness.

How do you prevent it?

- Proper fitting footwear, enough room or width in the toe area of the shoe or boot.
- Avoid trauma to the toenails.

Blisters

Blisters are the accumulation of fluid between the skin's inner and outer layers. These fluid filled bubbles are caused by friction, excessive moisture and/or shoes that are too tight or too loose. They are rarely serious but can become infected and force you to stop running if not treated properly. Prevention is key; properly fitted running shoes, blister-free socks to minimize friction and moisture. Putting sports lube (Bodyglide) and bandages over the blister-prone spots may also help. Ignore smaller blister (smaller than 5mm) but larger blisters can be opened. Using a sterile needle, prick the side of the blister and let it drain. Don't pull back or remove the loose skin. Then cover the area with a bandage. Within 48 hours, most blisters are dry enough to expose them to the air.

Sesamoiditis

What is it?

- Inflammation of the region around the tiny sesamoid bones, which are actually inside tendons that run to the big toe
- May also be a result of damage to the sesamoid bones themselves

What causes it?

- High impact activities which may irritate the tendons or cause damage to the bones; a sudden increase in activity levels
- Rapid weight gain or being overweight
- Loss of fat pad on bottom of foot with age which results in decreased cushioning

Signs & Symptoms

- May begin slowly as a dull pain but progressively increases in intensity into a more persistent throbbing pain

Treatment & Prevention

- Rest / reduce activity level until symptoms subside; choose low impact activities such as swimming in the interim
- Cushioning devices to offload pressure
- Low dye strapping (taping) to help immobilize the involved area
- Prescription custom orthotics to help correct structural foot problems if they are causing the pain
- Footwear that is properly suited to your foot type. Your chiropodist can provide further footwear advice

Heel Spur

What is it?

- A bony growth that occurs where the plantar fascia attaches to the heel

What causes it?

- Heel spurs are a secondary symptom of plantar fasciitis, an inflammation of the plantar fascia which is the fibrous band that runs along the bottom of the foot and maintains the arch
- As the plantar fascia is stressed and starts to pull away from the heel, the body tries to repair the injury by filling in the gap with bone

Signs & Symptoms

- May begin as a dull pain in the heel and sometimes in the mid or forefoot
- Pain may get sharper, more intense, and more persistent over time
- Pain is usually worst after getting out of bed in the morning or following a prolonged period of rest
- Visible swelling may be present in severe cases

Treatment & Prevention

- Prescription custom orthotics to help correct structural foot problems causing the pain, with additional cushioning to accommodate for the heel spur
- Icing for ten minutes three times per day and/or anti-inflammatory drugs to reduce inflammation
- Low dye strapping (taping) to help relieve stress on the plantar fascia
- Off-the-shelf arch supports for simple, non-severe problems
- Footwear that is properly suited to your foot type
- Stretching exercises for your plantar fascia
- Persistent problems may benefit from a cortisone injection
- As a last resort for rare, extreme cases, bone surgery may be performed by an orthopaedic surgeon; Chiropodists do not perform bone surgery and a person would be referred to a surgeon if all conservative measures for treating the heel spur prove ineffective

Achilles Tendinitis

Treatment involves reducing the stress on the tendon by controlling the amount of pronation the foot goes through and elevating the heel. This is accomplished with the use of an orthotic. Occasionally cortisone injections are also used. Tendons attach a muscle to a bone. (Ligaments run from one bone to another bone.) When a tendon is overly stressed, usually as a result of poor biomechanics coupled with increased mileage, a tendon can become inflamed. When the bones cannot stabilize properly, the muscles in the foot and leg try to make up the difference by working too hard for too long. Each muscle is designed to contract and relax while walking and running. Contracting for too long puts excess stress on the tendon and the sheath causing inflammation and pain. Severe trauma may cause tendon rupturing.

Controlling mechanics of the feet with an orthotic is essential in alleviating the symptoms. Rest, ice, massage and NSAIDs will also help to reduce the inflammation associated with tendonitis. Flexibility is also very important.

Foot & Ankle Sprain/Strains

Sprains

Sprains are an injury to a ligament; the tough, fibrous tissue that connects bones to other bone. Ligament injuries involve a stretching or a tearing of this tissue. Sprains typically occur when people fall and land on an outstretched arm, slide into base, land on the side of their foot, or twist a knee with the foot planted firmly on the ground. This results in an overstretch or tear of the ligament(s) supporting that joint.

Strain

Strain is an injury to either a muscle or a tendon, the tissue that connects muscles to bones. Depending on the severity of the injury, a strain may be a simple overstretch of the muscle or tendon, or it can result in a partial or complete tear. Strains can be acute or chronic. An acute strain is caused by trauma or an injury such as a blow to the body; it can also be caused by improperly lifting heavy objects or overstretching the muscles. Chronic strains are usually the result of overuse - prolonged, repetitive movement of the muscles and tendons.

Neuromas

A Neuroma is a nerve tumor (swelling) that occurs in the ball of the foot, between the metatarsals. A nerve courses between each of the metatarsal bones in the foot. When this nerve passes between the metatarsal heads at the ball of the foot, they will sometimes become pinched by a shearing force that occurs during pronation. This occurs most often between the third and fourth, or between the second and third toes. When the nerve is pinched, it becomes irritated, swollen and enlarged. Patients often will describe a burning or stabbing type of pain in the ball of the foot. The pain will sometimes radiate into the adjacent toes of the foot. Transverse pressure while palpating the toe usually elicits pain. People will say they get relief from removing their shoes and massaging their foot. Orthotics to control the underlying pronation and/or metatarsal pads can give relief.

Bunions

Bunions are enlargements of bone on the first toe joint. Some of the causes may be footwear, disease, genetics and by our old friend, overpronation. They are a progressive deformity. You don't just wake up one morning and there it is. How fast it develops depends on the amount of excess foot motion a person is born with. The area will often become painful and red. Controlling the excess pronation can often take pressure off the first toe joint and help to relieve the pain, but it will not change the size of the enlargement. An orthotic can stop or slow down the progression of the deformity, but only surgery can remove the excess bone.

Metatarsalgia

Metatarsalgia is a general term for pain in the area of the metatarsophalangeal joints (ball of the foot). Most common causes include Freiberg's disease, interdigital nerve pain (Morton's Neuroma- Interdigital nerve irritation), and capsulitis. Metatarsophalangeal joint (MPJ) pain usually results from tissue changes due to abnormal foot biomechanics. Sesamoiditis - is pain at the sesamoid bones beneath the head of the 1st metatarsal. Diagnosis for these conditions can be made within the clinical setting.

If you experience painful foot problems it is recommended that you see a foot care specialist ~ chiropodist or podiatrist.

J. Richard Werkman is a Registered Chiropodist providing exceptional foot care for all ages. For more information or to schedule an appointment, contact him at 905.845.4817 or info@werkman.ca www.werkman.ca.