

## TARSAL TUNNEL SYNDROME

Tarsal tunnel syndrome is an entrapment of the nerves in the tarsal canal (on the inside of your ankle). Symptoms may include numbness, tingling, “pins and needles” sensations and even severe pain radiating into your toes.

Tarsal tunnel syndrome can be caused by a number of factors. The majority of cases are caused by changes in gait, injury, and pressure from an external object such as a brace or shoe, degenerative diseases of the nerve, and chronic inflammatory disease, such as arthritis or tendonitis.

There is a ligament, which overlies the nerve in the tarsal canal. This ligament can become involved in the entrapment when there is swelling in the area. This ligament binds the nerve down and can become thicker or tighter. When this occurs it causes pressure on the nerve to the point where the nerve begins to die.

A thorough clinical exam is extremely important in differentiating this syndrome. We will often use tests such as an electromyogram (EMG) or nerve conduction velocity (NCV) test to help confirm our clinical observations and make the diagnosis of tarsal tunnel syndrome.

Various treatments are used once the diagnosis of tarsal tunnel has been made. These treatments may consist of immobilization, tapings and cortisone injections. Occasionally if this syndrome is caused by an inflammatory disorder, treating the inflammatory disorder can help. This can be done by using certain exercises, immobilization, bracing, changes in lifestyle, orthoses and anti-inflammatory medications.

If conservative therapy fails to relieve the symptoms, then surgery is indicated. This surgery attempts to release the nerve from the structures, which have bound it down. In most instances this surgery is successful. However, occasionally the tissue can scar back down onto the nerve and re-entrap the nerve. Even if the nerve is freed from the entrapment, the symptoms may still persist because the nerve may already be irreversibly damaged. In this instance, surgery will fail to alleviate the symptoms. It is important to realize that tarsal tunnel is a progressive degeneration of the nerve and therefore a delay in diagnosis and treatment only furthers the damage to the nerve. Therefore, it is important that you see your podiatrist if you notice any of the symptoms associated with tarsal tunnel syndrome.