Posterior Tibial Tendon Dysfunction (Flat Foot)

Introduction

The posterior tibial tendon is a long tendon which travels from the calf behind the inside of the ankle and attaches to a bone in the inner arch of the foot. This tendon helps to support the arch and helps to lift the heel off the ground during walking. The stretching or tearing of this tendon can cause pain and lead to an adult acquired flatfoot deformity.

Causes

Posterior tibial tendon dysfunction is more prevalent in women over the age of 50 but can occur with anyone. The tearing or stretching of the tendon may be caused by trauma or overuse. Other medical conditions such a s obesity, diabetes, previous surgery, and steroid injections may contribute to this condition.

Symptoms

Injury to the posterior tibial tendon can cause the arch to collapse and cause the ankle to turn inward. Pain is usually experienced to the inside of the arch as well as the outside of the ankle. Patients may have difficulty lifting their heel off of the ground as well. This condition is divided into three stages.

- Stage 1-pain, swelling and weakness to the tendon.
- Stage 2-flattening of the arch but the foot is still flexible.
- Stage 3-flattening of the foot becomes rigid and possibility of pain to the ankle.

Treatment

The treatment of this condition depends on which stage the patient is in at time of examination. Early stages can be treated non-surgically by rest and anti-inflammatory medications such as motrin. Sometimes immobilization such as placing a person's foot in a cast for a few weeks is recommended.
The next stages can be treated by orthotics and occasionally minor tendon surgery. Orthotics are custom made inserts which are made from plaster molds of your feet. They help to align the foot and support the arch and prevent the posterior tibial tendon from stretching further.

The later stages of deformity may require reconstructive surgery to stabilize the foot and ankle. This is needed to prevent further damage to the foot and allow it to function better.

X-ray and MRI evaluations can help the physician to correctly diagnose the severity of the problem. Bone as well as soft tissue changes can be evaluated with these studies.