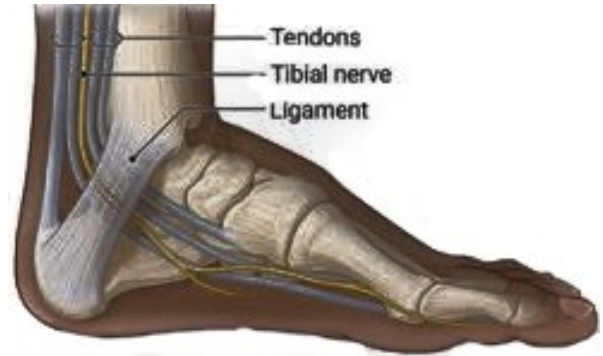


Tarsal Tunnel Syndrome: Causes, Symptoms, and Treatment

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What is Tarsal Tunnel Syndrome?

Tarsal Tunnel Syndrome (TTS) is a painful condition caused by the compression of the posterior tibial nerve as it travels through the tarsal tunnel, a narrow space inside the ankle. This syndrome is similar to carpal tunnel syndrome in the wrist but affects the foot and ankle.



Causes of Tarsal Tunnel Syndrome

Several factors can contribute to the development of Tarsal Tunnel Syndrome:

Injury or Trauma

- Ankle sprains or fractures can lead to swelling and compression of the posterior tibial nerve.

Flat Feet

- Flattened arches can stretch the nerve, increasing the risk of compression.

Systemic Conditions

- Disorders like diabetes or arthritis can lead to inflammation or swelling around the nerve.

Masses or Abnormal Growths

- Cysts, varicose veins, or bone spurs in the tarsal tunnel can apply pressure on the nerve.

Repetitive Stress

- Activities that involve repetitive use of the feet, such as running, can increase the likelihood of developing TTS.

How Tarsal Tunnel Syndrome Feels

The symptoms of Tarsal Tunnel Syndrome can vary in severity and may include:

- **Pain:** Sharp, burning, or aching pain along the inside of the ankle or foot.
- **Numbness:** A tingling or "pins and needles" sensation.
- **Weakness:** Difficulty standing or walking for long periods.
- **Swelling:** Inflammation in the area may accompany the symptoms.

Symptoms often worsen with prolonged activity or standing and may improve with rest.

Diagnosis of Tarsal Tunnel Syndrome

A healthcare professional may perform the following to diagnose TTS:

Physical Examination

Checking for tenderness or swelling along the tarsal tunnel.

Tinel's Sign

- Tapping the area to elicit tingling sensations.

Tests

- X-rays, MRIs, or ultrasounds may be used to identify structural abnormalities.
- Nerve conduction testing



Treatment Options for Tarsal Tunnel Syndrome

Non-Surgical Treatments

Rest and Ice

- Reducing activity and applying ice to the affected area can alleviate symptoms.

Orthotics

- Custom arch supports can correct flat feet and relieve pressure on the nerve.

Medications

- Anti-inflammatory drugs, such as ibuprofen, can reduce pain and swelling.

Physical Therapy

- Stretching and strengthening exercises can improve foot mechanics and reduce stress on the nerve.

Steroid Injections

- Corticosteroids may be injected into the area to reduce inflammation.

Surgical Treatment

If conservative treatments fail, surgery may be required. A procedure called **tarsal tunnel release** involves relieving pressure on the posterior tibial nerve by cutting the ligament that forms the tunnel.

Preventing Tarsal Tunnel Syndrome

Proper Footwear

- Choose supportive shoes with good arch support and cushioning.

Stretching and Strengthening

- Regular exercises to maintain flexibility and strength in the feet and ankles.

Managing Health Conditions

- Keep systemic conditions like diabetes and arthritis under control.

Avoid Overuse

- Take breaks during repetitive activities to reduce strain on the feet.
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Conclusion

Tarsal Tunnel Syndrome is a debilitating condition that can significantly impact mobility and quality of life. Early diagnosis and treatment are crucial to preventing long-term nerve damage. Whether through conservative measures or surgical intervention, most people with TTS can find relief and return to their regular activities.

If you experience persistent foot pain or numbness, consult a healthcare provider for evaluation and treatment.