

Sinus Tarsi Impingement (Sinus Tarsi Syndrome)

Symptoms of Sinus Tarsi Impingement

- The sinus tarsi is part of the subtalar joint located below the ankle joint
- Jamming of this joint with weight-bearing creates localized pain in the outside part (lateral) of the ankle (Figure 1)
- This jamming can lead to considerable local discomfort as all of the bodyweight may be concentrated in a small area
- Increased standing and walking often exacerbates symptoms

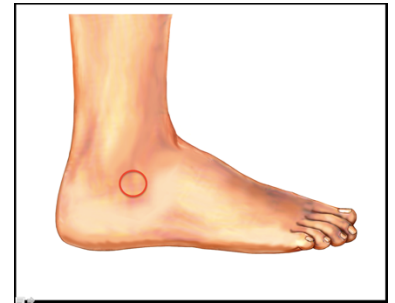


Figure 1: Sinus Tarsi Impingement location of pain

Physical Findings of Sinus Tarsi Impingement

- Patient will have localized tenderness in the sinus tarsi --the area just in front of the bone (fibula) on the outside of the ankle (Figure 1)
- Patient whose hindfoot bends/angles to the outside are more likely to have symptoms related to sinus tarsi impingement

Imaging Studies seen in Sinus Tarsi Impingement

- Weight-bearing x-rays of the foot will demonstrate evidence of impingement in sinus Tarsi.
- MRI and CT scans will show fluid and often cystic changes in the heel bone (calcaneus) at the level of the jamming (bony impingement). MRI and CT scan are usually not needed unless surgery is being considered

Treatment of Sinus Tarsi Impingement

Non-operative (conservative) treatment: Most patients with sinus tarsi impingement see improvement with conservative management including:

1. **Treatments designed to decrease the load through the sinus tarsi**
 - *Activity modification*
 - Look for ways to limit standing and walking
 - Perform exercises with less loading (ex. cycling instead of running)
 - *Comfort orthotics* -provides a soft foot bed to absorb load
 - *Weight loss* -losing 5-10 lbs will decrease ankle forces 15-30 pounds
 - *Comfort shoes* -gently curved stiff sole that is well fitted
 - *Ankle bracing* -may be helpful for some patients
2. **Treatments that aim to decrease the pain response**
 - *Physical therapy* -Can be helpful to improve range of motion and decrease inflammation
 - *Anti-inflammatory medications* -May provide short-term pain relief
 - *Acetaminophen* -Can help to lessen pain
 - *Corticosteroid injections* -injections in the sinus tarsi can decrease ankle inflammation and pain, often for months.

Surgical treatment may be indicated in patients with ongoing significant symptoms, in spite of optimal conservative treatment. Surgery may include:

- Local cleaning out (debridement) of the sinus tarsi
- Subtalar fusion
- Other procedures designed to correct an associated foot deformity