

Plantar Fasciitis

Explanation of Diagnosis

Plantar fasciitis is **inflammation of the plantar fascia**, a thick band of tissue that runs along the bottom of the foot from the heel to the toes. It is caused by **repetitive stress, overuse, improper footwear, flat feet, or high arches**. Symptoms include **sharp heel pain, especially in the morning or after prolonged standing, stiffness, and tenderness along the bottom of the foot**.

Specific Work Modifications

- **Avoid prolonged standing or walking on hard surfaces.**
- **Wear supportive, cushioned shoes with arch support.**
- **Use orthotic inserts or heel cups** to reduce pressure on the plantar fascia.
- **Take sitting breaks** if the job requires extended walking or standing.
- **Use anti-fatigue mats** if standing for long periods.

Specific Activity Modifications

- **Avoid high-impact activities** such as running, jumping, or walking long distances on hard surfaces.
- **Modify workouts** by switching to **low-impact exercises** such as swimming or cycling.
- **Wear proper athletic shoes with shock absorption** during sports.
- **Stretch and strengthen the foot daily** before and after activities.

Recommended Supplements

- **Collagen peptides (10 g daily)** - Supports tendon and ligament repair.
- **Vitamin D3 (1000-2000 IU daily)** - Aids in bone and soft tissue health.
- **Magnesium (300-400 mg daily)** - Helps with muscle relaxation and reduces foot cramps.
- **Omega-3 fatty acids (1000 mg daily)** - Reduces inflammation in the plantar fascia.
- **Turmeric (500 mg twice daily)** - Natural anti-inflammatory.

Recommended Nutrition and Hydration

Diet Recommendations:

- **Anti-inflammatory foods:** Fatty fish (salmon, sardines), turmeric, berries, nuts, and leafy greens.

- **Collagen-boosting foods:** Bone broth, citrus fruits, and bell peppers.
- **Protein-rich foods:** Chicken, eggs, lentils, and dairy to support tissue repair.
- **Limit processed foods, sugar, and alcohol,** which can worsen inflammation.

Hydration Tips:

- **Drink at least 2-3 liters of water daily** to maintain soft tissue hydration.
- **Limit caffeine and alcohol,** which can slow healing and increase inflammation.

Home Exercise Prescription

Perform **2-3 times daily** to improve foot flexibility, reduce pain, and strengthen the plantar fascia:

Stretching & Mobility

1. Plantar Fascia Stretch

- Sit and pull your toes back toward your shin.
- **Hold for 20-30 seconds, repeat 3 times per foot.**

2. Calf Stretch (Straight & Bent Knee)

- Stand facing a wall, place one foot back, and keep the heel on the ground.
- **Hold for 20-30 seconds, repeat 3 times per leg.**

3. Rolling Massage with a Ball

- Use a **tennis ball or frozen water bottle** under the foot and roll it gently.
- **1-2 minutes per foot, 1-2 times daily.**

Strengthening & Stability

4. Towel Scrunches (Arch Strengthening)

- Place a towel under your foot and use your toes to **scrunch it toward you.**
- **10 reps, 2 times daily.**

5. Heel Raises

- Stand and slowly raise onto your toes, then lower.
- **10 reps, 2 times daily.**

6. Toe Spreading Exercise

- Place your foot flat on the ground and try to spread your toes apart.
- **Hold for 5 seconds, repeat 10 reps per foot.**

Avoid walking barefoot, high-impact activities, and unsupportive shoes until symptoms improve.

Helpful Books

1. *"Every Woman's Guide to Foot Pain Relief: The New Science of Healthy Feet"* - Katy Bowman
2. *"Fixing Your Feet: Injury Prevention and Treatment for Athletes"* - John Vonhof

Click here for more orthopedic patient information.

Contact a Key West orthopedic clinic or reach out to Dr. Jason Pirozzolo.