

Ankle and Foot Sprains

Explanation of Diagnosis

A sprain occurs when the ligaments (tissues that connect bones) are stretched or torn due to excessive force, twisting, or rolling of the ankle or foot. Symptoms include pain, swelling, bruising, instability, and difficulty bearing weight. Mild sprains heal with rest, while severe sprains may require physical therapy or immobilization.

Specific Work Modifications

- Avoid prolonged standing, walking, or climbing stairs.
- Use supportive shoes with cushioning to minimize strain.
- If weight-bearing is painful, use crutches or a walking boot as advised.
- Modify tasks to allow sitting breaks and avoid uneven surfaces.
- Apply ice or elevate the foot during rest periods to reduce swelling.

Specific Activity Modifications

- Avoid high-impact activities like running, jumping, or sports that require quick direction changes (e.g., basketball, tennis).
- Modify exercise routines by switching to low-impact activities such as swimming or cycling.
- Use ankle bracing or taping when returning to sports to prevent reinjury.
- Reintroduce activities gradually once pain and swelling improve.

Recommended Supplements

- Collagen peptides (10 g daily) - Supports ligament and tendon repair.
- Vitamin C (500 mg daily) - Aids in collagen synthesis and tissue healing.
- Magnesium (300-400 mg daily) - Helps muscle relaxation and recovery.
- Omega-3 fatty acids (1000 mg daily) - Reduces inflammation and stiffness.
- Bromelain (500 mg daily) - A natural enzyme that reduces swelling and bruising.

Recommended Nutrition and Hydration

Diet Recommendations:

- Anti-inflammatory foods: Fatty fish (salmon, sardines), berries, nuts, turmeric, 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 and excess sugar, which can slow healing.

Hydration Tips:

- Drink at least 2-3 liters of water daily to support tissue recovery.
- Limit caffeine and alcohol, which can dehydrate tissues and delay healing.

Home Exercise Prescription

Perform 2-3 times daily once pain allows to restore strength and mobility:

Phase 1: Early Recovery (Days 1-5, Reduce Swelling & Pain)

- Ankle Pumps
Move your foot up and down like pressing a gas pedal.
10 reps, 2-3 times daily
- Alphabet Exercise
Use your toes to trace the alphabet in the air.
1-2 times daily
- Toe Flex & Extend
Slowly curl and straighten your toes.
10 reps, 2 times daily

Phase 2: Strength & Balance (After 5-7 Days as Pain Improves)

- Seated Heel Raises
While sitting, slowly lift your heels off the ground.
10 reps, 2-3 times daily
- Seated Ankle Circles
Rotate your ankle in circles clockwise and counterclockwise.
10 reps each direction, 2 times daily
- Towel Scrunches (Arch Strengthening)
Place a towel under your foot and use your toes to pull it toward you.
10 reps, 2 times daily

Phase 3: Advanced Strengthening (Once Walking is Pain-Free)

- Standing Heel Raises
Stand and slowly raise onto your toes, then lower.
10 reps, 2 times daily
- Single-Leg Balance
Stand on the affected foot for 15-30 seconds, increasing time as tolerated.
Repeat 2-3 times daily
- *Avoid running, jumping, or side-to-side movements until fully healed.*

Helpful Books

- "Rehab Science: How to Overcome Pain and Heal from Injury" - Tom Walters, DPT
- "The 5-Minute Fix: Easy Exercises to Relieve Pain and Improve Performance" - Joe Yoon

Click here for more orthopedic patient information.

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