NONSURGICAL ORTHOPEDICS — KEY WEST CONCIERGE ORTHOPEDICS

Stress Fracture of the Foot

Explanation of Diagnosis

A **stress fracture** is a **small crack in the bone** caused by **repetitive stress or overuse**, rather than a single traumatic injury. It commonly occurs in the **metatarsals (long bones of the foot), calcaneus (heel), or navicular bone**. Symptoms include **localized pain, swelling, tenderness, and pain that worsens with activity but improves with rest**. Stress fractures are common in **athletes, runners, military personnel, and those with osteoporosis or improper footwear**.

Specific Work Modifications

- **Avoid prolonged standing, walking, or weight-bearing on the affected foot.**
- **If possible, use crutches, a walking boot, or a supportive shoe** as recommended by your doctor.
- **Modify tasks** to allow for seated work and limit excessive foot stress.
- **Use cushioned shoes or orthotic inserts** to absorb impact.
- **Take frequent breaks** to reduce strain on the foot.

Specific Activity Modifications

- **Avoid high-impact activities** such as running, jumping, or hiking on uneven surfaces.
- **Modify workouts** by switching to **low-impact exercises** such as swimming or stationary cycling.
- **Wear proper footwear** with arch support and shock absorption.
- **Gradually return to activity** once cleared by a doctor, following a structured rehab plan.

Recommended Supplements

- **Calcium (1000-1200 mg daily)** - Supports bone healing and strength.
- **Vitamin D3 (1000-2000 IU daily)** - Enhances calcium absorption for bone repair.
- **Magnesium (300-400 mg daily)** - Aids in muscle relaxation and bone health.
- **Collagen peptides (10 g daily)** - Supports bone and connective tissue repair.
- **Omega-3 fatty acids (1000 mg daily)** - Helps reduce inflammation and pain.

Recommended Nutrition and Hydration

Diet Recommendations:

- **Bone-strengthening foods**: Dairy products, leafy greens, almonds, salmon, and fortified cereals.
- **Anti-inflammatory foods**: Fatty fish (salmon, sardines), turmeric, berries, and walnuts.
- **Protein-rich foods**: Chicken, eggs, lentils, and dairy to support tissue repair.
- **Limit processed foods, excess sugar, and carbonated drinks**, which can weaken bones.

Hydration Tips:

- **Drink at least 2-3 liters of water daily** to support bone healing and circulation.
- **Limit caffeine and alcohol**, which can reduce calcium absorption.

Home Exercise Prescription

⚠ **No weight-bearing exercises until cleared by your doctor.** Initially, focus on **gentle mobility and strengthening exercises** while protecting the fracture.

Phase 1: Early Recovery (Weeks 1-4, Reduce Pain & Swelling)

1. **Toe Wiggles & Ankle Pumps**
   - Move toes and ankles up and down to maintain circulation.
   - **10 reps, 2-3 times daily.**
2. **Non-Weight-Bearing Calf Stretch**
   - Sit and use a towel to gently pull your toes toward your shin.
   - **Hold for 20-30 seconds, repeat 3 times per foot.**
3. **Seated Foot Alphabet Exercise**
   - Use your toes to "write" the alphabet in the air.
   - **1-2 times daily.**

Phase 2: Strength & Balance (Weeks 4+, If Cleared for Weight-Bearing)

4. **Towel Scrunches (Arch Strengthening)**
   - Place a towel on the floor and use your toes to pull it toward you.
   - **10 reps, 2 times daily.**
5. **Heel Raises (Once Pain-Free)**
   - Stand and slowly raise onto your toes, then lower.
   - **10 reps, 2 times daily.**
6. **Single-Leg Balance Exercise**
   - Stand on one foot for **15-30 seconds**, increasing time as tolerated.

- **Repeat 2-3 times per leg.**

⚠ **Avoid running, jumping, or high-impact activities until fully healed (typically 6-8 weeks).**

Helpful Books

1. "*Strong Bones: The Ultimate Guide to Preventing and Treating Osteoporosis*" - Pamela Wartian Smith, MD
2. "*The Healthy Runner's Handbook: Injury Prevention & Recovery*" - Jason Karp, PhD

Contact Key West Concierge Orthopedics to reach out to Dr. Jason Pirozzolo or schedule a Concierge Care without the Concierge Fee™ appointment. Check out Nonsurgicalorthopedics.com and TopOrthoDocs.com to continue your research.