

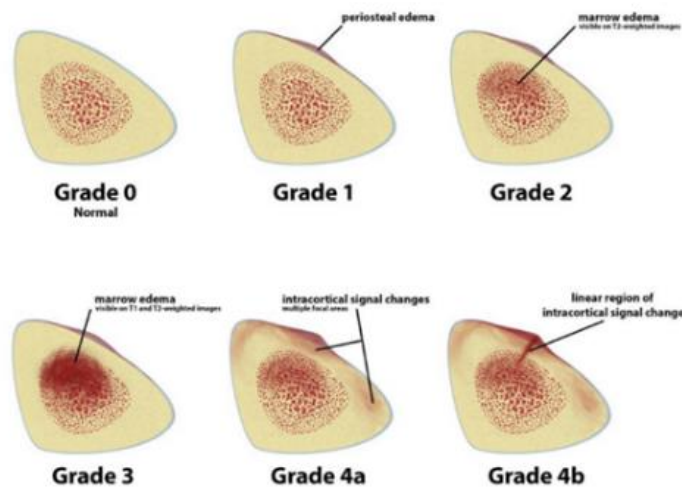


Stress Fractures (Bone Stress Injuries)

What is it?

Stress fractures are “*microfractures*” of the bone caused from overuse. Small cracks can develop in the bone when the stress of repetitive loads overwhelm the bone’s ability to repair itself. Stress fractures are most likely to occur as people either suddenly increase their training intensity, frequency or duration, or they simply over-train for prolonged periods of time. Stress fractures are most common in running and jumping sports.

They is a spectrum of **Stress Injuries that affect the Bone: Stress Injuries → Stress Fractures → Complete Fractures**



Symptoms:

Many symptoms mimic sprains, strains, and shin splints: pain, swelling, & tenderness with activity. The most common location for stress fractures are: various areas of the foot, shin, pelvis, and low back. These bones absorb the greatest forces during walking, running, and jumping.

How do you diagnose it?

A “Bone scan” and MRI are the most accurate tests to diagnose Bone Stress Injuries. X-rays often don’t show stress fractures, especially in the first few weeks or months.

Initial Treatment: It often takes **2-3 months** for Bone Stress Fractures to heal!

- **Rest, rest, rest!** - the most important treatment to allow the bone to heal (ie: rest from sports, running, jumping, etc).
- Crutches – as needed for pain
- Walking boot – for lower extremity, ankle, or foot
- Healthy diet – the “Athlete’s Plate”
- Good sleep
- Vit D 2000 IU & Ca 2+ 1000mg daily
- Avoid smoking

Long-term Treatment:

- Physical Therapy – for strengthening, gait retraining, biomechanical retraining
- Cross train w/ low impact exercises (swimming, biking, water running, resistance training, etc.)
- Shockwave Therapy and Bone Stimulators – controversial; might be able to accelerate healing but \$\$\$
- Surgery – rarely needed