

April, 2021



## Paragon Orthopedics Center Grants Pass, Oregon

# STRESS FRACTURES

The name might lead you to *believe* you know exactly what a stress fracture is. The details might surprise you though and help you or someone you know avoid one. Stress fractures are not always true fractures, but can easily lead to them. Most common areas are in the foot, shin bone (tibia), hip, and ribs. You don't have to have osteoporosis to experience a stress fracture, but you're at risk if you do have weak bones, and they happen to people across the spectrum. A stress fracture is a small crack in the bone, often very painful. They can happen in bones that have been weakened by health conditions such as osteoporosis, but they also happen in normal, healthy bones as a response to overuse or repetitive force. *Stress reactions* may occur prior to stress fractures and are also be caused by doing too much too soon, like when you start a new exercise routine. Here's the information you need to try to avoid them:

**CAUSE:** It can occur when the demands of an activity are rapidly increased by amount or intensity. It is the reaction of the bone to this increased demand. Typically there isn't a single, traumatic event, as you would see in a true fracture.

**SYMPTOMS:** Tenderness that starts in a specific spot and often worsens with time. Pain normally subsides at rest.

### RISK FACTORS:

- Sex: Females are more at risk than males, especially if they have abnormal menstrual periods.
- Lack of Vitamin D and calcium, or having an eating disorder.
- Previous stress fracture
- Increased activity, especially in duration, frequency, or intensity.
- High impact sports such as running, dance, track and field, gymnastics, tennis, soccer, and basketball.
- Having conditions that weaken bones, such as osteoporosis.
- Wearing worn-out shoes with little support or cushion.

### PREVENTION:

- Start new activities gradually and warm up before beginning any activity. Try to add no more than 10% additional activity each week.
- Wear proper, appropriate footwear for your activity with good support and cushioning.
- Cross train. People who participate in more than one sport are not overworking the same parts of their bodies repetitively. For example, when increasing your running program, mix in cycling or rowing
- Eat a well-balanced diet high in calcium and vitamin D for strong bones. Avoid processed, fatty foods.

### TREATMENT:

- An x-ray will usually diagnose the stress fracture, and sometimes MRI is necessary.
- Non-steroidal anti-inflammatories, such as ibuprofen, alleviate pain and inflammation. Use as directed.
- RICE: Rest, Ice, Compression, Elevate
  - Rest: It takes 6-8 weeks for a stress fracture to fully heal. A splint or boot may be needed
  - Ice: Apply cold packs for 20 minute intervals several times a day. Never apply ice directly to skin
  - Compression: Apply a light wrap to decrease inflammation
  - Elevate: As much as possible, keep the area elevated

When in doubt, call Paragon Orthopedics to talk to our knowledgeable staff. Dr. Bents and Dr. Van Horne are at your service to help you with this or any other orthopedic need/concern you might have. 541-472-0603

The following articles were referenced for this newsletter:

<https://www.mayoclinic.org/diseases-conditions/stress-fractures/symptoms-causes/syc-20354057>

<https://orthoinfo.aaos.org/en/diseases--conditions/stress-fractures-of-the-foot-and-ankle/>

<https://emedicine.medscape.com/article/1270244-overview#a2>