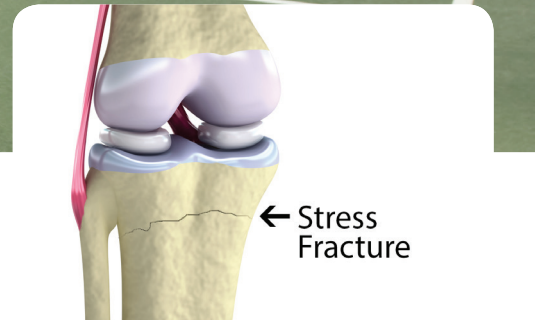


Knee Conditions: LOWER EXTREMITY STRESS FRACTURE

A *stress fracture* is a tiny crack in the bone from chronic overuse. Most stress fractures occur in the lower leg and foot. They can also occur in the hip and other areas.



Causes

A blow to the bone does not cause a stress fracture. Rather, it is typically caused by repeated stress or overuse. Some causes are:

- Increasing the amount or intensity of an activity too quickly (most common)
- Switching to a different playing or running surface
- Wearing improper or old shoes

Stress fractures can worsen by continued physical stress. Smoking can also make stress fractures worse because it interferes with bone healing.

Risk Factors

A risk factor is something that increases your chance of getting a disease or condition. Risk factors for a stress fracture include:

- Sex: female
- Certain sports, especially involving jumping or running:
 - Tennis
 - Track, especially distance running
 - Gymnastics
 - Dance
 - Basketball
- Amenorrhea (women only)
- Reduced bone thickness or density
- Poor muscle strength or flexibility
- Overweight or underweight
- Poor physical condition

Symptoms

Symptoms include:

- Localized pain on the bone
- Pain when pressure is applied directly over the fracture and the area around it
- Pain when putting stress on the affected leg
- Swelling and warmth at injury site

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Diagnosis

The doctor will ask about your symptoms and medical history, and examine the injured area for localized pain and swelling.

Tests may include:

- X-ray –to look for a break in the bone (Stress fractures are very tiny and usually not seen on an x-ray until at least two weeks after symptoms begin).
- MRI scan –to look for swelling and inflammation inside the bone
- Bone scan –to look for evidence of a stress fracture

Treatment

You may need to see a physical therapist to learn how to use crutches so you can keep weight off your foot. Sometimes a brace or cast is used for a short time to aid healing. Once you are out of the cast and off crutches, your physical therapist can prescribe an exercise routine to allow you a gradual return to normal activities.

Prevention

To reduce your chance of getting a stress fracture:

- Wear proper footwear.
- Run on a softer surface, such as grass, dirt, or certain outdoor tracks.
- Gradually increase the amount and intensity of an activity.
- Do not overdo any activity.
- Weight reduction can reduce stress on the bones
- Avoid smoking.