

STRESS FRACTURE

WHAT'S THE PROBLEM?

Stress fractures are an injury to bone caused by unaccustomed stress from running, marching, or walking. They are often seen in military recruits or athletes as they increase their training. They may also be seen in people with hormonal imbalances or prior surgery that has altered the way their foot or ankle functions.

HOW DOES IT FEEL?

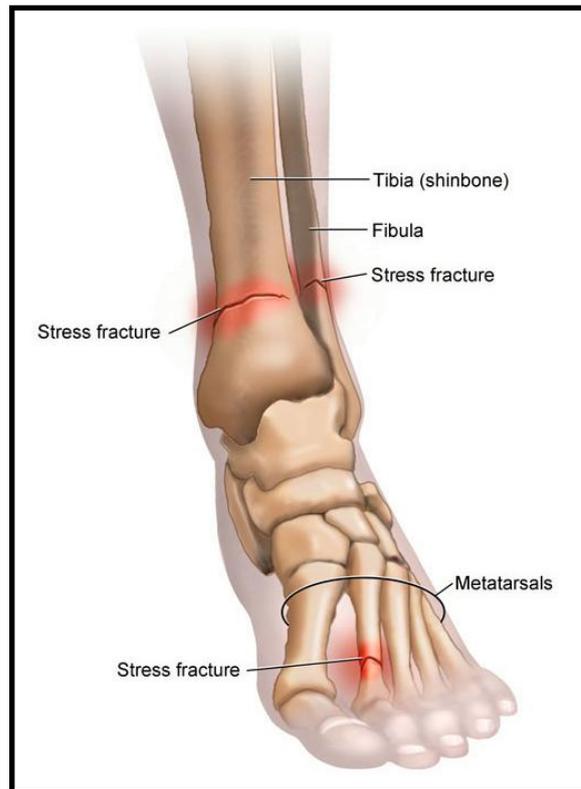
Stress fractures may feel like an ache in the foot or ankle, or may feel like a sharp pain when a lot of stress is placed on the foot with physical activity. You may also notice swelling around the site of the pain, but usually no bruising is present.

LET'S DO A TEST!

Your podiatrist may take an x-ray to determine if there is a break or crack in the bone. After several weeks a large calcium deposit or bone callus may be seen around the stress fracture. However, early on, when the pain starts, no change at all may be seen on x-ray. Your podiatrist may place a tuning fork on the area where they think a stress fracture may be located. This will result in pain being noted at a very distinct location. Finally, if doubt still exists about the diagnosis, your podiatrist may refer you for a bone scan, which shows increased bone production, if a stress fracture is present. This test is the most sensitive for detecting a stress fracture, but in clear cases may be unnecessary. In people at high risk for stress fractures, such as military personnel in basic training or people undertaking highly repetitive activities, normal x-rays do not change treatment plans and people are treated as if they do have a stress fracture.

HOW DID THIS HAPPEN?

Bone is a living tissue that also has large amounts of minerals that provide strength. When increased stress is applied, (sudden increases in exercise time or intensity) the bone responds by becoming stronger and denser where the



extra stress is applied. If there is not enough time for that adaptation to occur, small micro cracks develop. In severe cases, these small cracks can result in a complete displaced fracture if treatment is not initiated. Bone fractures are most commonly thought of as resulting from acute injuries that happen all at once. Stress fractures are another type of fracture that occurs gradually, from repeated injury, over use or stress, over longer periods of time.

WHAT CAN I DO FOR IT?

Stop whatever exercise you are doing that has resulted in your foot or ankle pain. Stress fractures are not caused by an injury like an ankle sprain or bumping something with your foot, so if you cannot remember a precise injury that started the pain, you may self-treat with ice, over-the-counter pain medications, and comfortable shoes. If there is not a decrease in pain over several days, see your podiatrist.

WHAT WILL MY PODIATRIST DO FOR IT?

After making the diagnosis of stress fracture, your podiatrist will tell you to decrease activity levels. You may either be instructed to wear athletic shoes or a

stiff soled shoe, to reduce bending motions of your foot when you walk. Depending on the location and severity, your podiatrist may recommend a cast and crutches. As the pain becomes less intense, you may gradually resume your activity level.

CAN I PREVENT IT FROM HAPPENING AGAIN?

Never increase exercise levels too quickly; no more than a ten percent increase per week. Always wear good supportive shoes that will absorb and cushion all the stress caused by your activity. If your stress fracture was a result of a medical condition, closely follow your podiatrist's instructions to prevent a recurrence.