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Cavus Foot

What Is Cavus Foot?

Cavus foot is a condition in which the foot has a very high arch. Because of this high arch, an excessive amount of weight is placed on the ball and heel of the foot when standing. Cavus foot can lead to a variety of signs and symptoms, such as pain and instability. It can develop at any age, and can occur in one or both feet.

Signs and Symptoms

The arch of a cavus foot will appear high even when standing. In addition, one or more of the following signs and symptoms may be present:

- Hammertoes (bent toes) or claw toes (toes clenched like a fist)



- Calluses on the ball, side, or heel of the foot
- Pain when standing or walking
- An unstable foot due to the heel tilting inward, which can lead to ankle sprains

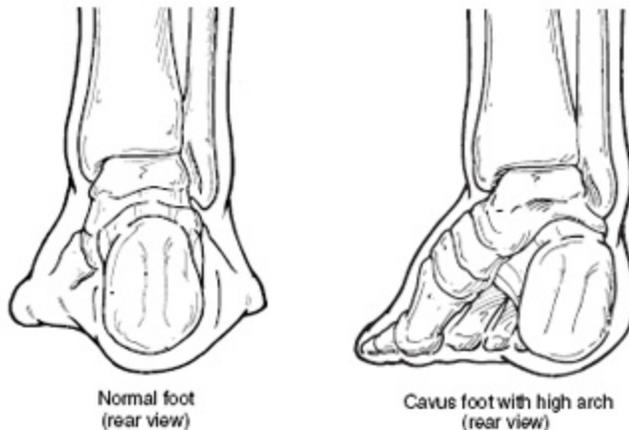
Some people with cavus foot may also experience foot drop, a weakness of the muscles in the foot and ankle that results in dragging the foot when taking a step. Foot drop is usually a sign of an underlying neurologic condition.

What Causes Cavus Foot?

Cavus foot is often caused by a neurologic disorder or other medical condition—for example, cerebral palsy, Charcot-Marie-Tooth disease, spina bifida, polio, muscular dystrophy, or stroke. In other cases of cavus foot, the high arch may represent an inherited structural abnormality. An accurate diagnosis is important because the underlying cause of cavus foot largely determines its future course. If the high arch is due to a neurologic disorder or other medical condition, it will probably worsen. On the other hand, cases of cavus foot that do not result from neurologic disorders usually do not change in appearance.

Diagnosis

Diagnosis of cavus foot includes a review of the patient's family history. The foot and ankle surgeon examines the foot, looking for a high arch and possible calluses, hammertoes, and claw toes. The foot is tested for muscle strength, and the patient's walking pattern and coordination are observed. If a neurologic condition appears to be present, the entire limb may be examined. The surgeon may also study the pattern of wear on the patient's shoes. X-rays are sometimes ordered to further assess the condition. In addition, the surgeon may refer the patient to a neurologist for a complete neurologic evaluation.



Treatment: Non-Surgical Approaches

Non-surgical treatment of cavus foot may include one or more of the following options:

- **Callus care.**
The surgeon often trims the calluses and recommends wearing small pads around the calluses to reduce pressure and pain. Patients should never attempt to trim calluses themselves, since this could do more harm than good and possibly result in an infection.
- **Orthotic devices.**
Custom orthotic devices that fit into the shoe can be beneficial because they provide stability and cushioning to the foot.
- **Shoe modifications.**
High-topped shoes support the ankle, and shoes with heels a little wider on the bottom add stability.
- **Bracing.**
The surgeon may recommend a brace to help keep the foot and ankle stable. Bracing is also useful in managing foot drop.

When is Surgery Needed?

If non-surgical treatment fails to adequately relieve pain and improve stability, surgery may be needed to decrease pain, increase stability, and compensate for weakness in the foot. Surgery is also considered for cases that are likely to get worse—even if there is currently no pain or instability. In these instances, the goal of surgery is to help reduce the severity of future problems.

The surgeon will choose the best surgical procedure or combination of procedures based on the patient's individual case. In some cases where an underlying neurologic problem exists, surgery may be needed again in the future due to the progression of the disorder.