

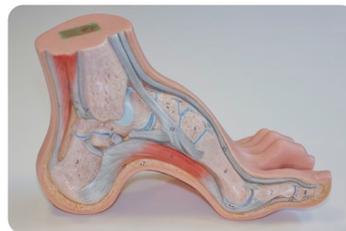
Cavus Foot

What is cavus foot?

Cavus foot is a foot shape in which the arch is much higher than normal. Often, the heels point inward, and the toes are flexed and curled up.



Normal Foot



Cavus Foot

What causes cavus foot?

Children are rarely born with cavus foot. Instead, it usually develops slowly over the first 10 years of life.

In most cases, children develop cavus foot because they have a nerve or muscle problem that makes some of the muscles weaker than others. These unbalanced muscles work unevenly, causing the arch to elevate. Usually both feet are affected, though one is usually affected earlier than the other. An inherited disorder called Charcot-Marie-Tooth disease (CMT) is the most common cause of cavus foot. But there is a long list of disorders that may cause the problem.

Cavus foot can also be caused by injury to the nerves in the legs or spinal cord. Cavus foot caused by injury usually only affects one foot.

What are the signs of cavus foot?

The most common sign of cavus foot is a gradual or fast elevation of the arch or arches in the feet. If your child has cavus foot they may find it difficult to find shoes that fit comfortably. They may also have:

- Calluses on the side, heel or ball of the foot
- Tightly flexed and curled up toes (claw toes)
- Foot pain while walking or standing
- Ankles that sprain easily

How is cavus foot diagnosed?

First, we ask your child to stand while we examine their feet for signs of cavus foot. Because cavus foot tends to run in families, we often ask to examine the feet of parents and other family members, too. We also check:

- The strength of the muscles in your child's legs, ankles, feet and toes since cavus foot is often caused by diseases that make muscles weak
- Your child's spine to make sure it is flexible and the right shape
- Your child's reflexes in the legs and belly (abdomen)

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To Learn More

- Orthopedics and Sports Medicine
206-987-2109
- Ask your child's healthcare provider
- seattlechildrens.org

Free Interpreter Services

- In the hospital, ask your nurse.
- From outside the hospital, call the toll-free Family Interpreting Line, 1-866-583-1527. Tell the interpreter the name or extension you need.

- We will ask if your child has had any problems controlling bowel movements or bladder.
- Finally, we will take X-rays (radiographs) of your child's feet. We may also take X-rays of your child's spine.

Once we know that your child has cavus foot, we will begin to look for the cause. Finding the cause may require seeing a pediatric neurologist who will order the following tests:

- Electromyogram and nerve conduction velocity (EMG/NCV) studies
- Blood test for Charcot-Marie-Tooth disease (CMT)
- MRI (magnetic resonance imaging) of the spine and brain

How is cavus foot treated?

Once we have found the cause and the underlying problem, we talk with you and find the best treatment for your child's cavus foot. In some cases, as with Charcot-Marie-Tooth disease, the best treatment for the cavus foot is surgery.

In the very early stages of cavus foot or with mild cases that are not getting worse, we may be able to use arch supports and modify your child's shoes to help relieve problems until surgery becomes necessary.

What should I expect if surgery is needed?

Surgery for cavus foot is complex. It often requires 2 surgeries performed 2 weeks apart.

First surgery

The doctor cuts and releases the tightest of the soft tissues in the arch. The rest of the tissues relax during the following 2 weeks.

Second surgery

The doctor cuts and reshapes at least one bone with insertion of a bone graft, and moves several tendons to new location on the foot to improve muscle balance.

What are the goals of surgery?

- Correct the cavus foot without joining together any joints (fusion)
- Balance out the muscles so that the cavus foot is less likely to happen again
- Reduce pain
- Increase mobility and activity level with the help of physical therapy