

John B. Pietsch, M.D. William F. Walsh, M.D. Kelly Bennett, M.D.

Clubfoot/ Clubfeet

What are Clubfoot and Clubfeet?

“Clubfoot” and “Clubfeet” are words used to describe several types of foot and ankle malformations. These malformations are usually present at birth. The medical name for the condition is “Talipes equinovarus.” The condition can range from mild to severe and may be seen in only one foot or both feet. There are other malformations of a baby’s foot that are *not* actually called clubfoot or clubfeet.

With clubfoot, the baby’s foot is twisted inward *and* downward. If both feet are affected, the term “clubfeet” is used. In this case, the toes of the feet point toward each other rather than straight ahead away from the body. Because the heel cord is often very tight, it is difficult to move the foot into a normal position.

What causes clubfoot/ clubfeet?

Clubfoot is a very common birth defect. The exact cause is unknown. The condition affects about 9,000 babies each year, or about one in every 400 children born in the United States. This condition is more common in boys than girls. It is also more common in babies who have a parent, brother, or sister with the condition.

Clubfoot may be caused by a combination of genetics and other factors that affect the baby's growth during pregnancy. These factors may include disease, infection, environmental factors, and the mother's use of drugs.

Most children born with clubfoot or clubfeet do not have any other deformities. In some cases, however, there can be other birth defects present as well. For example, babies born with spina bifida sometimes have a type of clubfoot. There is no way to prevent clubfoot. Parents who have a baby with clubfoot can learn about the likelihood of having another baby with this condition by talking to a genetic counselor.

How will this condition affect my baby's health?

This condition is not painful. In fact, the condition does not bother the baby until the time he or she begins to stand and walk. Because the ankle is twisted, the foot is unable to move normally. The child may walk on the ball of the foot or on the side or on the top part of the foot instead of on the sole. This causes problems for the parts of the feet that are not normally walked on. Normal growth of the leg is also affected.

Babies born with clubfoot should receive expert help shortly after birth. With this help, these children are able to walk normally, wear regular shoes, participate in sports and other activities, and lead normal, active lives. Surgery is one of the possible treatments. Of those treated with surgery, approximately 80% have a

good long-term outcome. Twenty percent of those who've had surgery may experience a return of the deformity that may require medical help in the future.

Treatment:

Treatment is usually begun shortly after birth, often during the first week. The goal of treatment is to gently and gradually manipulate the foot into place. This will help the foot begin to move normally.

Casts are used to stretch the foot into its normal position. The baby's bones, tendons, and ligaments are very flexible and easy to reposition. The cast is removed and reapplied every week or two for two to four months. This allows the foot to be continually stretched into a better position and held in place with a new cast.

After the last cast is removed, a very minor surgical procedure is performed on the hindfoot (heel and ankle). This surgery is needed to fully correct the foot by releasing the achilles tendon which is too tight. It requires a tiny skin puncture to release the tight tendon. After release of this tendon, one final cast is placed on the foot until it is completely corrected. Most clubfeet can be corrected in this manner.

In the most severe cases, surgery will be necessary to correct the deformity. Surgery may involve lengthening some tendons (tissues connecting muscle to bone) and shortening other tendons. This places the bones and joints in their

normal positions. A cast is usually placed on the foot after surgery to hold the foot in this position while it heals. The timing of surgery depends upon the advice of the surgeon, the safety of anesthesia, the size of the foot, and the severity and type of defect.