What is Clubfoot?
Clubfoot is a congenital deformity where the foot is rigidly turned inward and downward, and is misshapen like a club. It can range from mild and flexible to severe and rigid. One or both feet may be affected. The calf muscle and foot may be slightly smaller than normal.

Clubfoot is the most common deformity of the bones and joints in newborns. It occurs in about 1 in 1,000 babies. The cause of clubfoot is not exactly known, but it is most likely a genetic disorder and not caused by anything the parents did or did not do. The risk of having a second child with clubfoot increases to 1 in 30.

Manipulation and Casting
Casting is performed weekly. The cast material is "soft" and may be removed the night before or the morning of the next appointment allowing the child to be bathed. Prior to casting, the foot is gently manipulated. It helps if the baby is as relaxed as possible and the best way to do this is to feed during casting. If you are breastfeeding, consider pumping and bringing in a bottle.

At 4 to 6 weeks, the child’s foot is usually ready for the final stage of treatment – a heel cord release. This is a same day procedure performed in the hospital under general anesthesia. It involves cutting the Achilles tendon to allow the foot to dorsiflex. If this is not done, and the foot is forced up, the arch of the foot may break down. After the heel cord release, one final cast is applied and left on for 2 to 4 weeks. The infant’s heel cord heals very quickly, and the surgery will not cause any permanent weakness.

Bracing
Bracing is started after the final cast is removed. The Mitchell shoes with a Ponseti Bar is our preferred brace. It is comfortable and easy to use. It is extremely important that the brace fits properly and is worn as directed. Studies have repeatedly shown that the success of treatment is directly related to compliance with brace wear.

The brace is worn full time (24 hours except for bathing) for 3 months and then worn at naps and night-time until the child is 3 years of age. Following full correction of the clubfoot, clinic visits will be scheduled every 3-6 months for 2 years, and then less frequently. Your physician will decide on the duration of bracing depending upon the severity of the clubfoot and the tendency of the deformity to relapse.

Treatment Options
Treatment starts shortly after birth and consists of a series of manipulations followed by casting that slowly corrects the foot in a specific sequence. It is called the Ponseti Method after the doctor who developed it. Most children will need at least 4 to 6 casts followed by a heel cord release (Achilles tendotomy) to help with the final stage of correction.
Does Your Child have Clubfoot?

Common Causes
- The cause of clubfoot is unknown. It may be genetic and may run in some families.

Severe Clubfoot
Although the results are better if extensive bone and joint surgery can be avoided altogether, 5-10% of infants born with clubfeet have very severe deformities with stiff ligaments that are unyielding to the manipulation and casting. These babies need surgical correction after it is clear that attempts have failed to improve the deformity with Ponseti Method.

Outcome
A child with a clubfoot, corrected by the Ponseti Method, can be expected to have a nearly normal foot. Some minor differences may be noticed. The treated clubfoot is slightly smaller than the normal foot and there is a slight reduction in the size of the lower leg muscles. The amount of difference depends on the original severity of the clubfoot. A small, but insignificant degree of shortening of the leg may be seen. Children with clubfeet can participate in sports like anyone else. Famous athletes such as Mia Hamm (soccer), Kristi Yamaguchi (figure skating) and Troy Aikman (pro football) had clubfeet and have had very successful athletic careers.

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