Clubfoot (Congenital Talipes Equinovarus)

What is a clubfoot?
A clubfoot is a congenital foot abnormality. It is one of the most common pediatric orthopedic conditions. The heel tilts in and down, and the forefoot is also turned in. Without treatment, a patient with a clubfoot will walk on the outside of the foot which may produce pain and/or disability. A clubfoot is usually smaller than an unaffected (normal) foot. The calf is also usually smaller on the side of the clubfoot. One or both feet may be affected.

Why does it happen?
The exact cause of the clubfoot is unknown. It cannot be prevented, but it is treatable. A child with a clubfoot should still grow and develop normally and be able to walk, run and play sports.

How is it treated?
Treatment may involve casting, stretching, bracing or even surgery.

The goal of treatment of the clubfoot is to have a functional, pain-free foot with good mobility and strength.

Two non-surgical techniques are used in newborns and young infants. The first consists of daily stretching, taping and splinting by a physical therapist and parent. The second consists of weekly cast changes by an orthopedist followed by bracing.

- **Stretching, Taping and Splinting Program**
  This treatment is a specialized physical therapy program consisting of stretching, stimulation and taping of the foot. This treatment program is performed daily. A plastic splint is also used between treatment sessions. Parents will learn the technique during the first few months. After this, they will be able to continue the treatments at home. Occasionally casting or release of the tight heel cord may be necessary. Children may continue to wear the plastic splint at night until he or she is at least two years old.

- **Serial (“Ponseti”) Casting Program**
  This treatment involves positioning of the foot followed by application of a cast. The casts extend from the toes to the top of the thigh. They are removed and changed every one or two weeks in the clinic. Usually the doctor will need to release the tight heel cord in the clinic or in the operating room. After casting is complete, patients wear a special brace full-time for three months and then at night until two or three years of age. **The brace is crucial to prevent the clubfoot from recurring.**

Surgery
If non-surgical treatment does not completely correct the foot or the foot deformity recurs, an operation will usually be successful in correcting the foot. Most patients wear a cast for one to three months following surgery. The cast may need to be changed during this period. After the cast is removed, your child may need to wear a special brace to help prevent the clubfoot from recurring.