Home Care Instructions for Clubfoot Casting

The physicians of the Pediatric Orthopedic and Scoliosis Center are dedicated to the care and treatment of your child. The technique pioneered by Dr. Ponseti for the treatment of clubfoot has been developed, studied and utilized over more than 50 years. Our pediatric orthopedic specialists have adopted this method of treatment. The family’s understanding and commitment to this program, from beginning to end, is a very important element for success in the child’s care. This brochure provides you with a step-by-step outline of our clubfoot treatment plan.

Your child’s foot is being placed in a cast to begin to correct the turning in of his/her foot and to prevent future deformity.

Treatment consists of gently massaging and manipulation of the clubfoot to stretch the contracted tissues. A cast is then applied to maintain this correction. After the foot has been in this position for approximately 5 to 7 days, the muscles and ligaments will stretch enough to make further correction possible. The cast is removed by an ortho tech with a cast cutter, and the same process of gentle massage and manipulation is repeated at one week intervals for approximately six weeks until your doctor feels adequate correction has been achieved.

To help correct the deformity, the Achilles tendon needs to be released in about 80% of the babies before the application of the last cast. This is called a tenotomy. The tenotomy is done under anesthesia with a very thin scalpel. A few drops of blood may stain the back of the cast to the size of a quarter or more. Your child may be more uncomfortable than the previous casting for 1 to 2 days. Tylenol drops are usually sufficient for pain. The tendon will heal and reattach within 2-3 weeks.
1. Check the circulation in the foot every hour for the first 12 hours after application, and then four times a day. This is done by pinching the toes and watching the return flow of blood. The toes will turn white and then return quickly to pink if the blood flow is good to the foot. This is called blanching. If the toes are dark and cold or do not rapidly return to pink when released, the cast may be too tight. If this occurs call the cast room at Children’s Hospital between 7:30 a.m. and 6:00 p.m. Monday through Friday (858) 576-1700 ex. 4570 or bring your child to the Emergency Department at Children’s Hospital, you may also call (858) 576-1700 and ask to speak to the Orthopedic Resident on call.

2. The top of the toes should be exposed. If you cannot see the toes, it may mean the cast has slipped and correct reduction is not being maintained. If this happens call the cast room ASAP.

3. Keep the cast clean and dry. The cast may be wiped with a slightly dampened cloth if it becomes soiled. Keep the top of the cast outside the baby’s diaper to prevent soiling.

4. The new cast should be placed on a pillow or soft pad because hard surfaces may dent wet plaster. Whenever your child is on his/her back, place a pillow under the cast to elevate the leg so the heel is just beyond their pillow. This prevents pressure on the heel.

5. Use disposable diapers and change the baby often to prevent cast soiling. Apply the diaper above the top of the cast to prevent urine/stool from getting inside the cast. Diapers with elasticized legs work well.

Notify the cast room if you notice the following:

- Any drainage on the cast.
- Any foul smelling odors coming from the inside of the cast.
- If the skin at the edges of the cast becomes very red, sore or irritated.
- If your child runs a fever of 38.5°C/101.3°F or higher without an explainable reason, such as a cold or virus.

Following the removal of the last cast and in order to prevent a relapse, the baby will be fitted with a Denis-Browne splint (shoes turned outward attached to a metal bar). The splint will be worn 23 hours a day until your child is standing, and thereafter, at night and during naps for an additional 2-4 years. The first and second night of wearing the splint, the baby may be uncomfortable, but it is important the splints not be removed. It is advisable to remove the shoes briefly to check your child's feet for redness or irritation after the first few hours of initial splint use. After a few nights, the baby will adapt to the splint, and it will no longer be necessary to perform this initial foot check. Relapses will almost invariably occur if the splint is not worn as prescribed. When the splint is removed, ordinary shoes can be worn. Yearly visits will be scheduled for the next 3-4 years to check for possible relapses.