

INFORMATION FOR PARENTS ABOUT CLUBFOOT AND IT'S TREATMENT

This following information has been compiled to assist you in learning more about your child's condition, its treatment, and the important role you play in the treatment. It provides instructions, help and advice.

Please note: Never hesitate to talk to the doctor, if there are any problems, questions or uncertainty about the instructions given to you.



What is Congenital Clubfoot?

Clubfoot is a developmental deformation and will be seen right from the baby's birth. Clubfoot can involve one foot or both feet.

During the development, tendons and ligaments (in the back and inside) of the foot fail to keep pace with the development of the rest of the foot. As a result, these tendons and ligaments tether the back and inner parts of the foot down, causing the foot to point downwards, and twist inwards. The bones of the feet are therefore held in that abnormal position. The foot is turned, stiff and cannot be brought to a normal position by the child in a normal manner.

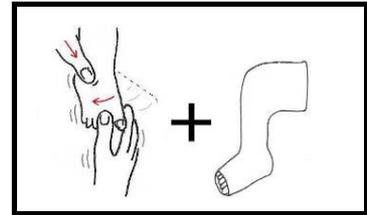
When to start the Clubfoot Treatment (Ponseti)?

- **about 7-10 days after birth :** **the best**
- **before 9 months of age :** **very effective**
- **between 9-28 months:** **helpful** in correcting all or much of the deformity
- **after 28 months:** **still effective**, but children may require other surgery

Overview of the Clubfoot Treatment (Ponseti)

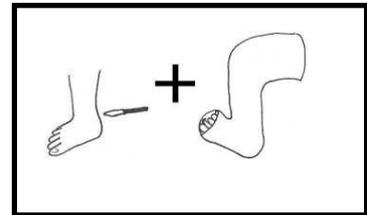
1. Manipulation + Cast for correction

- Over a number of weeks, the foot is gently corrected by manipulating the bones into the right position.
- After every manipulation, the foot and leg are put into a plaster cast for 5-7 days to maintain the position.
- This procedure will be repeated at least 4-6 times.
A more severe clubfoot may need more casts.



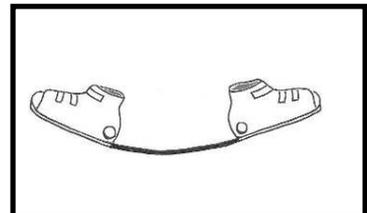
2. Tenotomy or cutting of the Achilles tendon and Cast for correction

- In most cases the Achilles tendon will be cut to complete the correction. This is done by using local anaesthetic and takes only a few minutes.
The tendon repairs itself and in doing so, gives the foot the dorsal flexion that it needs.
- The foot and leg are then cast again, with that cast staying on for 3 weeks.



3. Bracing to maintain correction

- When the last cast is removed, your child's feet will be put in a brace which should be kept on 23 hours a day, for 3 months.
The brace is only taken off for bathing.
- After 3 months, your child will only have to wear the brace for naps & sleeping (14-16 hours a day), for approx 4 years.
- The bracing is a critical part of the treatment.
Even though the child's feet will look normal, if your child does not wear the brace during naps & sleeping, the feet will probably relapse.
After the child reaches 6 years of age relapse is rare.



The description above is the normal procedure for young babies/children with clubfoot.

If your child is already older, or has other health problems in addition to clubfoot, the treatment plan may differ.

To achieve the best result from treatment, the instructions need to be followed closely.

INSTRUCTIONS AND HELPFUL ADVICE **FOR THE CASTING PHASE**



Each time the casts are changed, come prepared with something for your child to eat or drink e.g. a bottle, or a favourite toy or book to keep them occupied while the new casts are applied.

1. After the 1st casts are applied

Your child may be uncomfortable. This is usually because the casts are quite heavy until they dry completely.

1. Roll up a small towel and put it under the knees until the cast is dry.
2. Distract your child by playing, singing, feeding or doing something that he/she enjoys.
3. After a few hours or so, the child will get used to the cast.
4. As soon as the casts are dry, allow the child do whatever he/she usually likes to do. Don't worry about damaging or dirtying the casts, they are strong. During humid weather ensure that the cast is fully dry and firm before allowing the child to crawl.
5. When the child is sleeping, always roll up a towel and put it under the knees to relieve pressure on the heels.

2. While the Casts are on

- Keep the casts dry. Never use water to clean the cast, just wipe off any dirt.
- In winter, socks can be worn over the dry casts to keep them clean or to keep your child's toes warm.
- Use diapers or a cloth to cover your baby's bottom, so the casts don't get soiled.
- You cannot bath your child while he/she has the casts on.
- To keep the child clean:
 1. Lay the undressed child on a towel.
 2. Wet your hands and lather them up with soap.
 3. Rub your child all over with soap.
 4. Rinse the soap carefully off with a cloth, but don't get casts wet.
 5. Dry child with a towel and dress the child.
- Check your child's feet regularly.
Check your child's feet several times a day to make sure they are a normal colour and warm. Do this by pinching the toes and watching the return flow of blood. The toes will turn white and then quickly return to pink, if the bloods flow to the foot is good.
- Call your doctor if:
 - The toes don't return to their normal colour.
 - The toes are swollen.
 - The toes are white or purple or blue.
 - The skin at the edges of the cast becomes very red, sore, or irritated.
 - The cast is too tight.
 - The cast is cracked or no longer hard.
 - The cast gets wet and is no longer hard.
 - You notice a bad smell coming from inside the cast.
 - You cannot see the toes – call the doctor immediately.

INSTRUCTIONS AND HELPFUL ADVICE **FOR THE BRACING PHASE**

When the baby is taken out of the final cast and placed into the brace, it can take 3 - 7 days to adjust. The discomfort comes from missing their “security cast” and also from not having the ability to kick the legs independently.



Never remove the brace in response to crying - the child needs to adjust!!!

The first few days are critical to long term brace tolerance. If you remove the brace in the first few days, your child will learn that crying is an effective way to be free of the brace, and this will cause you a lot of trouble in getting your child to wear the brace effectively.

You also need to know, that failure to use the brace in the correct way and for the correct time is the most common cause of relapse!

Wearing of the brace needs to become a normal part of your child’s daily routine.

1. How to put the brace on

1. Make sure the skin is clean and very dry before putting the brace on.
2. Never use lotions on any red spots on the skin, it makes the problem worse.
3. Put the brace on, by first fitting the most difficult foot. Gently push the foot in dorsiflexion and then push the heel first into the brace. Keep the foot in good position. First close the inside strap and then the other straps of the shoe. Then fit the other foot.
4. Make sure that the heel is properly placed in the brace. Use the inspection holes to ensure the heel is in the correct position. You must be able to see the heel through both holes in the shoe.
5. Help your child to get used to the brace by playing with her/him and teaching her/him to kick both legs together in the brace.

2. Fulltime bracing (23 hours a day) for 3 months

Only take the brace off for a bath. But not more than 1 hour.

3. Sleep time bracing (14-16 hours a day) for 4 years

1. Change from the fulltime to the sleep time bracing, only on Doctor's orders.
2. Put the brace on before the child goes to bed for a daytime nap or to sleep at night. Never let your child stand with the brace on.
3. When the child is out of the brace, encourage the child to squat a few times through the day, to stretch the muscles.
4. Do stretching exercise, if the doctor instructs you to do so.
5. Give your child soft flexible shoes to wear for walking.
6. Don't miss regular check ups, even if everything is going well.
7. Your child's brace needs to be changed for a bigger size only when the toes are completely curled over the edge of the shoes.
8. Never stop using the brace unless the doctor tells you to stop.

4. Common Problems

1. If your child's foot is slipping out of the brace, check that the shoe is closed tightly enough. If you cannot prevent the foot slipping out of the brace, see the doctor.
2. If your child complains frequently, check to ensure that there is no sore or blister on the heel. If there is, see the doctor.
3. If your child is removing the shoes:
 - a) Put socks on over the whole shoe.
(This will not always stop them, but it makes it harder for them to remove.)
 - b) Continue to put the brace back on!
4. If there is any relapse, see the doctor as soon as possible. Don't wait for the next regular check up.
5. If the brace is broken, call the doctor, so a new brace can be ordered.

MORE INFORMATION AT:

www.global-help.org/publications/books/book_cfponseti.html

www.uihealthcare.com/topics/medicaldepartments/orthopaedics/clubfeet/index.html

