

Ponseti Technique

Your child has been diagnosed as having Congenital Talipes Equinovarus (CTEV). The treatment that your child is to have is called the Ponseti Technique.

What is the Ponseti technique?

This is to straighten the feet and the treatment manipulates the bones and stretches the contracted tissues of the foot. The foot is held in place with a plaster cast and this is left on for seven days. This allows enough time for the muscles and ligaments to relax and for the bones to grow in to the correct position.

What happens next?

At your next appointment the plaster will be removed and the doctor will position the foot again and a new plaster is applied to hold the next position.

How many times does the plaster have to be reapplied?

Each child and each foot is individual but the plaster can be reapplied six times or more.

How can I help?

Your baby needs to be relaxed during the procedure. You can bring a feed, which you can give during the process of manipulation and plastering.

Will my child need an operation?

Usually an operation, called a tenotomy, is required. Some children do not require this but 80% to 90% do. This is usually carried out at six to seven weeks from commencing the treatment. Once your child's foot is in the correct position the tendon at the back of the heel needs to be released. The tenotomy is usually carried out in the outpatients department and is a quick procedure. A local anaesthetic is used to numb the skin at the back of the heel. The doctor then uses a small sharp sterile surgical instrument to cut the tendon lying just under the skin surface. A sterile dressing is applied to the small wound. Your child's foot will then be put in the final position. A plaster cast is then applied to hold this position.



What should I bring?

During the tenotomy your child may get upset and cry because their foot and leg have to be held in one position, so you can help by bringing a feed to help relax your baby. You may also like to bring your partner or a friend/relative with you.

What else do I need to consider?

It is important that your child does not have any vaccinations two weeks prior to the tenotomy and three weeks after the tenotomy, because vaccinations can interfere with healing. You must inform the doctor if your child has had any vaccinations during the times stated above, or if you have an appointment with your GP or Health Visitor for vaccinations.

How long will my child be in plaster?

The plaster is removed three weeks following the tenotomy. Your child will then be given some specially made boots that are joined together by a metal bar (sometimes called Dennis Brown Boots or Markel Boots). The bar holds the feet in their correct position. The boots and bars must be worn at all times for three months. You can remove the splint for a maximum of 30 minutes once a day in order to bathe your baby. After three months your child will only need to wear the boots and bars whilst asleep (this includes daytime naps). Your child must wear the boots and bars whilst sleeping until they are about four years old. During the day your child needs to wear well-fitted shoes.

Plaster care instructions

You must:

- Check your baby's toes are pink and warm at every nappy change.
- Check your baby's skin around the edges of the plaster for any signs of the plaster rubbing, for example redness.
- Keep the plaster dry.
- Change your baby's nappy frequently to avoid soiling of the plaster. Disposable nappies with elasticated legs usually work well. Try to fit the leg of the nappy above the top of the plaster, to avoid urine leaking under the plaster.





You must contact the hospital if:

- You cannot see your babies toes.
- Your babies toes are not pink and warm.
- The plaster become loose, cracked or crumbles.
- Your baby is crying more than usual and appears to be in pain.

It may be because the plaster is rubbing in an area that is not visible.

Further instruction for boots and bar stage

A member of the orthotics team will fit the boots and bar on the day the three week plaster cast is removed. When the plaster is removed your baby's feet and legs may look quite swollen and their skin can be quite sensitive. This will start to settle down once the plaster has been off for a few days. You will be taught how to fit the boots yourself, so the boots can be taken on and off at home. The boots are set to the correct angle, which must not be altered by anyone other than a member of the Ponseti Team.

Why are the boots and bar important?

The boots and bar hold the feet in the position needed to stop the muscles and ligaments becoming tight again.

How long will my child wear the boots and bar?

The boots and bars are to be worn 23 hours plus per day for approximately three months. They can only be removed for bathing and dressing (30 minutes maximum). After three months the boots can be worn for sleeping and napping only. Well-fitting shoes must be worn for all other times. This is usually up to the age of four years.

Will my child need any other special equipment?

No, your child can use their pram, car seat or high chair, as long as the strap between the legs is detachable it can be threaded between the bar and legs.

How are the boots fitted?

The affected foot is usually fitted first, where both feet are affected the least flexible foot first. Boots can be worn with or without socks. It is important to make sure the heel is placed at the back of the boot and held firmly in place. If the toes move back in the shoe this usually means that the heel is not flat in the boot.



Will my child be comfortable in the boots?

Your child will probably be upset when they first have the boots fitted. This is because it is frustrating to your child to have both feet joined together with the bar. You can help your child through play by doing exercises that teach your child to bend both knees at the same time. Your child will soon learn to move both feet together. If you notice your child is crying more than usual, check the boots are fitted correctly and that they are not rubbing the skin. This may indicate that the boots are getting too small or the bar needs lengthening and if blisters occur your child will need to be seen in clinic.

You must contact the hospital if:

- You have difficulty fitting the boots yourself.
- You are worried your child's skin looks sore.
- If you think the boots and bars look too small.
- If you are concerned about your child's feet.

If you do not follow all of the instructions the treatment is likely to be unsuccessful.

Contact details:

Orthopaedic Outpatients Department, Doncaster Royal Infirmary,
Tel: 01302 366666 ext 3549.

Out of hours, please contact Doncaster Royal Infirmary,
Tel: 01302 366666 ext 3247.

Orthotics Department, Doncaster Royal infirmary,
Tel: 01302 381374.

Useful web sites

www.ponseti.org.uk

www.steps-charity.org.uk

Patient Advice & Liaison Service (PALS)

PALS staff are available to offer advice or information on healthcare matters. The office is in the Main Foyer (Gate 4) of Doncaster Royal Infirmary. Contact can be made either in person, by telephone or email. PALS staff can also visit inpatients on all Trust sites.

The contact details are:

Telephone: 01302 553140 or 0800 028 8059

Minicom (Text talk): 01302 553140

Email: pals.dbh@dbh.nhs.uk

Orthotics

