

Information for patients

Ponseti method of treatment for CTEV



Alice Ward

What is CTEV?

This is the medical term for club feet and refers to the manner in which the foot is twisted out of its normal shape or position:

Congenital: deformity present at, or prior to, birth

Talipes: Latin word referring to the ankle or foot

Equino: Latin word for horse referring to the way the foot points downwards, like a hoof

Varus: medical term referring to the way the foot turns inwards

What causes CTEV?

It is one of the most common abnormalities found at birth but the cause is unknown although likely theories include:

- Hereditary; there is research evidence to suggest that there is an increased chance of having CTEV if there is a family history of it
- Developmental; foetus fails to develop properly

CTEV occurs in about one or two out of every 1000 live births and may affect both feet or just one. Rarely it may be associated with other conditions such as a dislocated hip or spina bifida.

Boys are more commonly affected than girls and if your son has it there is a one in 30 chance of having another baby with it.

What treatment is available?

The preferred method of treatment in this hospital is the 'Ponseti' approach. To be successful treatment needs to be commenced early and consists of gentle massage and manipulation of the foot.

A plaster cast is then applied from the toes to the thigh with a 90° bend in the knee to maintain the amount of correction achieved. This process will be repeated on a weekly basis for about six weeks or until a satisfactory degree of correction has been achieved.

At this stage the majority of cases will require a small surgical procedure under a local anaesthetic called a 'tenotomy' to release the heel cord (Achilles tendon). This necessitates admission to our children's ward.

You can go home two hours after your baby returns to the ward following the procedure providing s/he is well, taking feeds, has passed urine and appears comfortable. Another plaster will now have been applied and will stay in place for about three weeks until the tendon heals. Following removal of this plaster special boots attached to a bar are applied.

Why are the boots and bar important?

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

How long will they need to be worn?

The boots and bar are worn for 23 hours per day for 12 weeks; they can be removed for bathing. After 12 weeks they are worn over night and during daytime naps only. Well fitted shoes should be worn at all other times; this is usually until the age of five years.

Will my child need any other special equipment?

No, your child can use their pram, car seat and high chair as before provided the strap between the legs is detachable so that it can be threaded between the bar and the legs. If your child is wearing trousers they will need to have poppers or buttons up the legs.

How are the boots fitted?

They are fitted in clinic and set at the correct angle. They should be worn with socks and you will be taught how to fit them yourselves before leaving. It is very important to make sure that the heel is placed at the back of the boot and held firmly in place by the tongue and heel-retaining strap.

Once the heel is in the correct position the laces/straps can be fastened and the other boot fitted in the same way.

Will my child be comfortable in the boots?

Your child maybe a little upset when the boots are first fitted. This is not because they are in pain but because they do not like being restricted by having both feet joined by a bar.

You can help by teaching your child exercises through play that teach them to bend both knees at the same time and they will soon learn to move both feet together.

The boots may cause some redness and blistering and can be padded to try and prevent this. If you notice that your child is crying more than usual it is worth checking that the boots are not rubbing.

How often will we need to attend out patients?

- You will first be seen one week after having the boots
- Then in another five weeks
- Following this appointment you will be seen in six weeks time again
- Every three to six months thereafter.

You must contact the hospital if:

- You have difficulty fitting the boots
- You are worried that the skin is sore
- You think the boots and bar are too small
- You are concerned about your Childs feet in any other way

Possible risks and complications of this treatment may include:

- Slipping of the plaster which must be reported to the hospital (they may slide off completely or slip down so the toes can not be seen so well, if at all).
- The plaster may rub the skin.
- The boots may also slip and rub and some people find it difficult to comply with wearing them but this part of the treatment is vital to maintain the correction already achieved. Failure to comply is likely to result in the deformity recurring.
- The position of the foot may not be improved.
- Following surgery there will be a small scar and there is a slight risk of infection and bleeding.

Practical advice:

A parent who has experienced this form of treatment has provided the following practical tips.

- When the plaster is wet it gets everywhere so it is advisable not to wear dark clothes, although it does wash out easily.
- When the plaster is drying it feels extremely cold as do the toes so put big socks on your babies feet and use extra blankets.
- The top of the plasters could chaff the soft skin on the thighs. Put cream on the sore bits and pad the plaster with cotton wool.
- Don't worry about the plasters getting messy just wipe off what you can and ignore the rest.
- Following surgery the plasters may be slightly bigger than previously so bring bigger clothes or just cover with blankets.
- When the plasters eventually come off for the last time the condition of the skin and shape of the legs and feet will be slightly swollen for a few days but will improve quickly.
- When given the boots your baby will take time to get used to them. They're not in pain, just really frustrated. Persevere; it's really worth it.
- If you want to use sleeping bags check the length and width.
- Use trousers with poppers or just take the bar off for a minute when changing nappies.
- If your child is getting sweaty feet try plain cotton socks.

What are the benefits of the Ponseti treatment approach?

It can correct the deformity at an early stage which will improve walking and prevent the long-term need for splints and special footwear. If left untreated for longer the surgery required would be more complex.

Is there any alternative treatment?

Treatment is not obligatory and some may choose to accept the deformity in which case splintage and/or special footwear will be required. Surgery may be offered at a later date but this tends to be more complex as bony surgery may then be necessary.

Please be aware that the information within this leaflet is meant for general guidance only. Each case is treated individually and variations may occur. Please follow any additional directions given to you by your baby's health care team.

Useful contact numbers:

Children's outpatients (Mon-Fri, 9am-5pm) **01691 404510**

Alice Ward (Children's Ward, 24 hour) **01691 404444**

Email: rjah.ctev@nhs.net

'**STEPS**' is a national charity that supports families who have children with abnormalities of the lower limbs. They can be contacted on **01925 750271** or www.steps-charity.org.uk

If you require a special edition of this leaflet

This leaflet is available in large print. Arrangements can also be made on request for it to be explained in your preferred language. Please contact the Patient Advice and Liaison Service (PALS) email: rjah.pals.office@nhs.net

Feedback

Tell us what you think of our patient information leaflet. Please send your comments to the Patient Advice and Liaison Service (PALS) email: rjah.pals.office@nhs.net

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