

Clubfoot

The aim of this leaflet is to answer some of the questions that you or your child may have about clubfoot and its treatment. You will also have an opportunity to discuss any further concerns with us in clinic.

What is clubfoot?

Clubfoot is a common deformity that is often seen on the 20 week pregnancy scan but only confirmed at birth. It occurs in about 1 in 1,000 babies. We don't know the cause. What is important for you to know is that after treatment your baby will have an essentially normal looking foot with normal function. Clubfoot usually results in no physical disability and you can expect your child to lead a normal active life.

What is the treatment for clubfoot?

Traditionally, clubfoot was treated by one or more operations. Nowadays, the Ponseti technique is used worldwide. In 1995 a study was published that showed at 30 year follow-up, people treated with the Ponseti technique did better than those treated with surgery.

What is the Ponseti technique?

It is a minimally invasive technique of correcting clubfoot. It is divided into 3 distinct stages:

- **Step 1 – Correcting clubfoot with manipulation and plaster casts:** The foot is manipulated by specialist physiotherapists to stretch the tight ligaments and tendons. A plaster cast is then applied from the toes to above the knee to hold this stretch. Casts are changed on a weekly basis as the position of the foot gradually improves. Usually about five to seven casts are needed.
- **Step 2 – Achilles tenotomy:** About 90% of children (9 out of 10) also require a small surgical procedure, called an achilles tenotomy, to improve the position of the foot. This is performed in the clinic with local anaesthetic (so your child would be awake but the area would be numbed). A tiny cut is made to lengthen the tight heel-cord at the back of the heel and then a further cast is applied for three weeks.
- **Step 3 – Maintaining correction with a foot abduction brace (boots and bar):** Clubfoot deformity tends to relapse after it is corrected. To prevent this, after the last cast is removed, a brace consisting of special boots fitted to an adjustable bar must be worn. It is necessary to wear the brace 23 out of 24 hours a day for the first three months. After that, the brace is worn at night and nap times up to the age of five. It is very important that this plan is followed. Establishing a routine when applying the brace has also been shown to be helpful in allowing your child to adjust to the brace. Your physiotherapist will be happy to answer any specific questions about how to apply the brace and adjust it as needed.

Follow-up care and relapses

After the clubfoot has been corrected, we will ask you to return to the clinic fairly regularly at first, and then less frequently as your child gets older. Your doctor will decide when the brace can be safely discontinued. To prevent relapses, do not discontinue the bracing on your own. If the deformity recurs during the first two to three years, re-manipulations and casts may be needed. Occasionally, the heel-cord may need to be re-lengthened. About 25% of patients (a quarter of those treated) require a more formal operation called a tibialis anterior tendon transfer before school age. This requires a general anaesthetic (your child will be asleep) and an overnight stay in hospital. The doctor will discuss this in more detail if needed.

What to expect in the future

A child with a clubfoot corrected using the Ponseti technique can be expected to have a nearly normal functioning foot. The treated foot will be slightly smaller than the other side, but rarely more than one shoe size. Also, the calf muscle will be smaller on that side. Although the child may notice these differences, especially when approaching self-conscious adolescent years, they are usually forgotten in subsequent years. Children and adults with corrected clubfoot participate, and can even excel, in all sports.

Contact us

If you require any further advice please contact: Children's Foot Clinic Team on 0118 322 5248
Nina Doherty, Clinical Nurse Specialist 0118 322 8746 or 0118 322 5111, bleep 232.

To find out more about our Trust visit www.royalberkshire.nhs.uk

Please ask if you need this information in another language or format.

RBFT Orthopaedics (Paediatric), February 2023. Next review due: February 2025