Ponseti Boots and Bar

Fitting guidelines and care instructions



The brace

Ponseti treatment is a worldwide gold standard for treating Talipes equinovarus also known as clubfoot. If treatment is managed as prescribed, the likely outcome is a painless, functional foot requiring no further treatment. In some cases, the severity of the initial clubfoot, or not following the recommended treatment plan, may cause regression and further management will be required.

The boots and bar, also known as a foot abduction brace are a pair of special shoes that clip onto each end of a bar, holding the feet in the right position to correct the clubfoot and

maintain position after casting and surgery. There are many different boots and bars on the market. All follow the same clinical guidelines for management. The MD Ponseti Ankle Foot Orthotics (AFOS) (boots) and bar are used through Queensland Health.

The wearing of the boots and bars is the most challenging phase for parents. Some babies and children may feel distress initially at being unable to move their legs freely, but they do adapt with time.

Wear schedule, bathing and hygiene

For the first 4-6 months following casting, the boots and bar will need to be worn full time (23.5 hours a day). The boots and bar can be removed for bathing, skin checking and dressing (30 minutes a day).

After 6 months the brace is used for naps and sleeping until age 5.

This is a general treatment plan and sometimes your referring doctor will have an alternative plan dependent on your child's needs.

When your child first starts to wear the boots and bar, it is important to check the skin on a regular basis. It is normal to see some redness under the strap areas. Even if your child is very tolerant of the brace it is still important to carefully check their skin during their bathing time throughout their treatment.



Start wearing the boots and bar for 2 hours. Slowly increase by 1 hour at a time, until your child is wearing them full-time.

Clothing

Boots should always be worn with a well-fitting pair of socks. Socks with a grip bottom are useful as they help hold the brace in position. Loose socks can cause fabric folds, which may cause pressure injuries.

Other clothing should be worn over the brace. Clothing with press studs allow you to change your baby's nappy without needing to take the boots and bar off. It is recommended sleep bags/grow bags be used instead of cot sheets to avoid your child getting tangled with the brace in the night.



Fitting of the brace

Once your child's brace has been fitted by your orthotist, you can follow this guide to put on and take off the brace. Your orthotist will also guide you through the process of fitting during your child's appointment to ensure you are comfortable with the process at home.

You should not alter the brace after it has been adjusted to fit your child – adjustments should only be made by a qualified orthotist, physiotherapist or orthopaedic surgeon.

Applying the brace:

- 1. Place heel firmly into the back and bottom of the boot, bending the knee as you do so (start with the affected foot/worse affected foot). The buckles are on the inside of the leg
- 2. Hold the foot in place while maintaining the heel position. Fasten the middle ankle strap first to help hold the ankle in place then follow with the top and toe strap. Ensure the tongue is positioned correctly and sits flush under the straps
- 3. After the straps have been fastened, re-check that the heel is still in position. The heel has two viewing windows (shown below). If the heel is not correctly positioned remove and reapply the boot
- 4. Clip the boots onto the bar
- 5. To remove, unclip the boots from the bar and unfasten the buckles.





It is vital that the heel is positioned correctly in the back of the boot. If the heel lifts off the back of the boot the tendons can re-tighten and further surgery and casting may be required.

Always check that the toes are not disappearing into the boot as this may indicate the heel is lifting. If the heel or toes are slipping in the boot you will need to have the fit checked by your orthotist or physiotherapist.

Always supervise your child during tummy time and follow SIDS guidelines for sleeping.

Boots and bar tolerance through treatment

You child may be upset when starting the boots and bar management. Wearing the boots and bar will slowly become their new 'normal' and they will settle into the routine.

After the initial phase children are generally quite tolerant of the brace. As they get older, their tolerance may reduce. Try to make it a part of their nightly routine, and encourage the child to have a role in their own treatment. Allow them to assist putting the brace on, or get them to place it on a teddy or doll etc.

Always continue to monitor the fit of the brace. A poorly fitting brace may be uncomfortable and could result in the child not wanting to wear the brace.

Tips and ideas

- Support the bar when you carry your child to avoid the weight tugging down on their legs
- Make putting on the boots and bar part of a night time routine
- Wrapping the bar with fabric will prevent noise/clicks against the cot while in bed and will protect your child and furniture when they start moving around in their brace.

Resources

www.clubfootaustralia.com

When to get help

It is normal for your child to feel restricted in the brace, however, it should not cause discomfort.

Please contact the service if you are concerned about any of the following:

- If the brace causes pressure sores or prolonged redness
- If the heel is rising out of the boot
- If the boots and bar appear too small or need adjusting
- If you are at all concerned about your child in the brace or the fitting of your child in the brace.

You will need to contact your orthotist so the boots can be reviewed. Reviews can take place during your child's clubfoot clinic at Townsville University Hospital, or as an outpatient at our facility on the Kirwan Health Campus.

Failure to follow the recommended treatment plan with boots and bar management may put your child at risk of regression, further surgery, further casting or potential long-term complications.

For outpatient appointments please contact:

Prosthetic and Orthotic Services

Kirwan Health Campus 138 Thuringowa Drive Kirwan, QLD 4817

Phone: (07) 4433 2370

Fax: (07) 4433 9491

Any skin/wound management concerns can be discussed with the Paediatric Outreach nursing staff on 4433 2152.



