

# Clubfoot and the Ponseti Method

## *Boots and Bar Stage*



## **The Ponseti Method** **Clubfoot Clinic** *of the Rubin Institute for Advanced Orthopedics*

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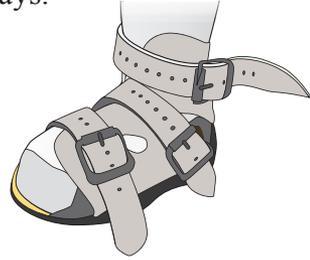
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## Boots and Bar Stage

Your child is now in the last stage of Ponseti treatment! A member of the team will fit the boots and bar the same day that the final casts are removed. When the casts are removed, your baby's legs and feet might look swollen. The swelling will begin to go down within a few days.

### Why are the boots and bar important?

Your child's feet are now in a corrected position. The boots and bar hold the feet in this position to prevent the muscles and ligaments from becoming tight again.



This is a very important part of treatment because a relapse of clubfoot can occur if the boots and bar treatment schedule is not followed.

### Compliance during this stage is vital. Failure to use the boots and bar may lead to a recurrence of the clubfoot deformity.

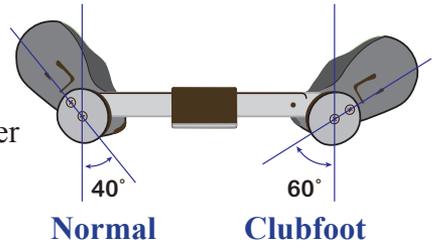
- **90%** of children have a recurrence of clubfoot if they stop wearing the boots and bar at **age 1 year**.
- **70–80%** of children have a recurrence of clubfoot if they stop wearing the boots and bar at **age 2 years**.
- **30–40%** of children have a recurrence of clubfoot if they stop wearing the boots and bar at **age 3 years**.
- **10–15%** of children have a recurrence of clubfoot if they stop wearing the boots and bar at **age 4 years**.
- **6%** of children have a recurrence of clubfoot if they stop wearing the boots and bar at **age 5 years or older**.

### Will my child need any other special equipment?

No, your child can continue to use his or her stroller, car seat, or high chair without any special equipment. As long as the strap that goes between the child's legs is detachable, it can be threaded between the bar and legs. Your child's pants will need to have snaps or buttons between the legs.

## Who fits the boots and bar?

Immediately after the final casts are removed, a member of the medical team will perform the first fitting. Then you will be taught how to apply the boots and bar. The boots are set at the correct angle on the bar, and this angle should not be altered by anyone other than a member of the medical team.



## How are the boots fitted?

The club foot is fitted first. When both feet are affected, the least flexible foot is fitted and then the other foot is fitted. If the child is using a removable bar, it is fitted last and the feet are positioned at the correct angles.

It is very important to make sure that the heel is placed against the back of the boot and is held firmly in place by the tongue and heel-retaining (middle) strap. Once the heel is in place, the other straps can be fastened.

You can use a pen to mark on the boots the farthest position that the toes reach while they are in the boot. If the toes move back, it usually means that the heel is not flat in the boot.

Your baby's feet might be swollen when the boots are initially fitted, so you might need to tighten the strap after the child has worn the boots for a few days. Also, over time the leather might stretch and you might need to make new holes in the leather strap to ensure a snug fit. A strap that fits snugly is very important because blisters might occur if your child can move his or her foot in the boot.

Once your baby has been fit with the boots and bar by our staff, you will have the opportunity to put them on with our guidance. We will schedule a follow-up appointment in one week to make sure things are going well. If any issues occur, such as slipping out of the boots or blisters, you should contact our office.

## *Boots and Bar Stage*

### **Will my child be comfortable in the boots and bar?**

Your child will probably be upset when he or she has the boots and bar fitted. However, this is not because it is painful. This is the first time that your child's feet are joined together, and your child might feel frustrated when he or she cannot move each leg independently.

You can help your child learn how to bend his or her hips and knees at the same time. The more time that the child spends in the boots and bar, the sooner he or she will get used to moving both legs together.

If you notice that your child is crying more than usual, check to see if the boots are fitted correctly and check for rubbing or blisters. If a blister develops, please contact the medical team because the child will need to be seen in the clinic.



### **If my child is uncomfortable, can I remove the bar and use only the boots?**

No, the boots by themselves do not prevent recurrence of clubfoot. The bar maintains the correction by keeping the feet in the corrected position.

### **How can I prevent my child from getting blisters?**

To prevent blisters, it is important that the child "breaks in" the boots and bar during the first few days that they are worn. After the boots and bar have been worn for the first time for 1 hour, remove your child's boots and socks and check for red spots or rubs on the feet and heels. If there are no areas of concern, put the boots and socks back on and check again after 2 to 3 hours. Continue to increase the amount of time between checking your child's feet. By the second or third day, your child should be comfortable in the boots and bar for 23 hours a day.

### **How long will my child have to wear the boots and bar?**

The boots and bar are to be worn 23 hours a day for the first 3 months of treatment. They should be removed only for bathing and dressing. You may remove the boots and bar for 2 hours each day: either one hour twice a day or 2 hours once a day. After 3 months, your child will begin to transition from wearing the boots and bar 22-23 hours a day to wearing them 12-14 hours a day.

## What are boots and bar weaning schedule methods?

There are three different methods for weaning your baby from wearing the boots and bar for 22-23 hours a day to wearing them 12-14 hours a day. Try to arrange your schedule so that the child spends most of the time in the brace while he or she is sleeping: “nights and naps.”

### 1. “Cold Turkey” Method

**First 3 months:** Wear 22-23 hours a day

**Fourth month:** Go “cold turkey” wearing the boots and bar for just “nights and naps” 12-14 hours a day.

### 2. Wean to wearing 12-14 hours a day over the period of 4 months:

**First 3 months:** Wear 22-23 hours a day

**Month 4:** Go to 18-20 hours a day

**Month 5:** Go to 16-18 hours a day

**Month 6:** Go to 14-16 hours a day

**Month 7:** Go to 12-14 hours a day

### 3. Wean to wearing 12-14 hours a day over a period of 4 weeks:

**First 3 months:** 22-23 hours a day

**In the 4th month, switch to the following schedule:**

**Week 1:** Go to 18-20 hours per day

**Week 2:** Go to 16-18 hours per day

**Week 3:** Go to 14-16 hours per day

**Week 4:** Go to 12-14 hours per day

## *Boots and Bar Stage*

### **How often will my child need to be seen in the clinic?**

After the boots and bar have been fitted, your child needs to return to the clinic 1 to 2 weeks later for an exam. If the child does not experience any problems, you will need to return for an appointment in 3 months. After the medical team has approved wearing the boots and bar for sleeping only, the child will need to be seen in the clinic every 3 to 6 months.

### **Can I use other brands of the boots and bar?**

Several companies make the boots and bar. We generally use the Mitchell boots with a solid Ponseti bar because they work well for most children. The Dobbs Bar with Mitchell shoe attachment is useful for certain children who do not tolerate their feet in a static position and are having difficulty tolerating the solid bar. There are also "bar-less" braces if patients are not tolerating the boots and bar.

### **What if my child outgrows the boots and bars?**

As your child grows, the feet will need to be fitted for new boots and bars. This will be done during a scheduled clinic check-up. Alternatively, you can call to have your child's feet fitted between scheduled visits.

#### **You should contact the clinic if:**

- ❖ You have difficulty applying the boots and bar yourself.
- ❖ Your child's skin looks sore or blistered.
- ❖ Your baby is escaping from the boots by himself or herself.
- ❖ You think that the boots and bar look too small or are damaged
- ❖ You have concerns about your child's feet.

**IF YOU DO NOT FOLLOW  
THE INSTRUCTIONS IN THIS BOOKLET,  
THE CLUBFOOT DEFORMITY IS  
LIKELY TO RECUR.**

**Useful links:**

Our Website:

[www.limblength.org](http://www.limblength.org)

Ponseti International Website for Parents:

<http://www.ponseti.info>



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