

Matthew B. Dobbs, M.D.
Associate Professor
Pediatric Orthopedic Surgery
Washington University
School of Medicine

Dr. Dobbs set out to increase patient compliance by making a foot abduction brace that is easier to wear, allows the child to kick and crawl, and still maintains abduction.

Parents of clubfoot children everywhere are praising his new brace, patented as the "Dobbs Bar."

Made by

D-Bar Europe 57 Amiens Street Dublin 1, D01YY11, Ireland.

PH: +44 (0) 1732860158 FAX: +44 (0) 8452807222



## Iowa Spring Assisted Bar



www.c-prodirect.com

A Revolution in Clubfoot Treatment

### The lowa Spring Assisted Bar

Now it is easier than ever to get a child in and out of his or her clubfoot brace. Just put the open-toe shoes on the child's feet and click them into place on our new lowa Spring Assisted Dobbs Bar.

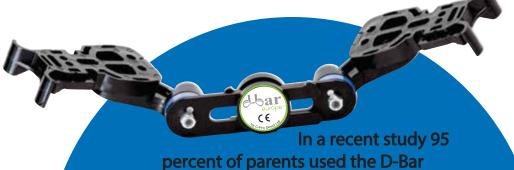


- Quick Release mechanism allows AFO's to snap on and off for diapering, carseats, and high chairs.
- A spring reset brings the child's feet back to neutral in a resting position. The spring maintains an active dorsiflexion stretch while still allowing the child to play and crawl in the brace.

The spring assist provides a dynamic stretch on the calf, allowing patients to

 build calf muscle strength while moving and playing in the brace which helps mitigate the calf atrophy commonly seen in clubfoot patients.

- Forefoot extensions keep the brace flat on the floor so the child can stand easily in the brace
- Clear easy to dial degree settings with a simple turn of a screw.
- Lets children kick and move their legs independently while maintaining abduction.
- Independent motion makes it harder to pull out of shoes and reduces irritation.



percent of parents used the D-Bar Brace as prescribed, compared to 60 percent compliance with traditional bracing.

# Setting Up The Dobbs Bar

• **Setting the bar width.** The Dobbs Bar should be set so that the width of the bar is equal to the shoulder width of the child. Measure the shoulder width of the child from the left outside shoulder to the right outside shoulder. Adjust the length of the Dobbs Bar so that the length of the bar



is equal to your shoulder width measurement from mid-heel of the left footplate to midheel of the right foot plate.

Using the provided hex key, loosen the screw(s) on the

center clamp and slide the width of the bars open until they match the shoulder width of the child. Once the width is correct, retighten the screw(s) to lock the bars firmly in place.

• Setting external rotation. Loosen the screw in the center of the black swivel arm and rotate degree plate piece outward until the pointer on the black swivel arm lines up with the correct degree setting on the degree plate. Retighten the screw in order to lock in the desired angle of external rotation

The clubfoot should be set at about 60-70 degrees of external rotation, which should match the degree of rotation of the foot in

the last cast. If the foot was externally rotated only 60 degrees in the last cast the brace should also be at 60 degrees. A normal, non-affected foot should be fixed on the bar in about 30-40 degrees of external rotation.

• Attaching the foot plate. Sizes 000-3 requires the small lowa Shoe plate with two screws placed into the back two holes, and one screw in the appropriately lined up hole in the front of the AFO. Sizes 4-7 will require the large lowa shoe plate, with two screws being inserted into the center holes marked "C". Using the provided hex key, first tighten one screw halfway, then tighten the other screw completely. Then go back and tighten the first screw all the way. Sizes 8-9 will require the large shoe plate, with two screws as well. These two sizes (8 & 9) will use the holes marked "R" for the right AFO and "L" for left AFO. Iowa AFO will always be placed on the bar with the buckles to the inside.

#### Using the quick disconnect feature.

Once the shoe plate is attached to the AFOs slide the quick connect footplate into the back of the shoe plate that you just attached to the AFO. To release the AFO, use your thumb to squeeze the release levers located on the bottom of the footplate. Slide the AFO forward, while squeezing the release lever and the AFO will be free

### **Advice for Parents**

- Play with your child in the brace. Babies might get fussy for the first few days after receiving a brace, and will require time to adjust. Playing with your child is the key to getting over the irritability quickly. Teach your child that he/she can kick and swing the legs with the brace on by gently moving your child's legs up and down together and independently until he/she gets used to the brace.
- Make it routine. Children do better if you develop a fixed routine for brace wear. During the three to four years of night/naptime wear, put the brace on anytime your child goes to the "sleeping spot." They will figure out that when it is "that time of day" they need to wear the brace. Your child is less likely to fuss if this is a consistent routine.

- Pad the bar. Padding the metal bar will protect you and your furniture. Padded Bar covers are available in pediatric patterns from D-Bar Enteprises. See our website for more details.
- Check your child's feet. It is important to check your child's feet several times a day after initiating the bracing to ensure no blisters are developing on the heel. Never use lotion on any red spots on the skin (lotion will make the problem worse). Some redness is normal with use. Bright red spots or blisters, especially on the back of the heel, usually indicate that the heel is slipping. Ensure that the heel stays down in the shoe by securing the straps and/or buckles or by talking to your orthotist about placing a heel pad in the shoe.
- Always wear cotton socks. Your child should always wear cotton socks under his/ her shoes, sandals or plastic AFO's. The sock should be a little higher than the top of the shoes, sandals or orthosis. Allow your child's toes some freedom.

