



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  
256\_MKT\_D\_Bar\_IFUs\_Markell\_Spring\_Assist\_001



## Markell Spring Assisted Bar



[www.c-prodirect.com](http://www.c-prodirect.com)

## A Revolution in Clubfoot Treatment

## The New Markell 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 Markell Spring Assist Dobbs Bar.

- Quick Release mechanism allows shoes and custom 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.



- New 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.



In a recent study 95 percent of parents used the Dobbs 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 mid-heel of the right foot plate.



Using a Phillips screwdriver, loosen the flat head 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 Phillips head screw(s) to lock the bars firmly in place.

- **Setting external rotation.** Loosen the Phillips head screw in the center of the black swivel arm and rotate the red "Y" piece outward until the pointer on the black swivel arm lines up with the correct degree setting on the red "Y" piece. 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.** Attach the black foot plate to the bottom of the Markell shoes/AFO by lining up the two countersunk holes in the black foot plate with the two holes on the bottom of the shoes. Using the standard head screws provided, first tighten one screw halfway, then tighten the other screw completely. Then go back and tighten the first screw all the way.
- **Using the quick disconnect feature.** Once the foot plate is attached to the shoes, slide the black foot plate onto the two red clips and slide the foot plate forward to engage the spring plunger and lock the shoes in place. To release the shoes, pull the spring-loaded plunger while pushing the plate backwards towards the child's heel.

Angle Setting  
Pointer



## 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/nap-time 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 Enterprises. 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.

## Instructions for Use

The Dobbs Bar should be worn 23 hours a day for the first 3 months and then at nighttime and naps for 3 to 4 years.

*Bracing is critical in maintaining the correction of clubfeet. If the brace is not worn as prescribed, there is a near 100 percent recurrence rate.*

