



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."

C-Pro Direct Ltd, 7a Enterprise Way
Ltd, Eenbridge, Kent TN8 6HF

EC REP C-Pro Direct Ireland Ltd, 57
Amiens Street, Dublin, Ireland,
D01YY11



*Markell Adjustable
Spring Assist Bar*



www.c-prodirect.com

**A Revolution in
Clubfoot Treatment**

The New Markell Adjustable Spring Assisted Bar

- Quick Release mechanism allows shoes and custom AFO's to snap on and off for diapering, car-seats, 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.



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 the provided hex key, 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

Shoe/AFO
Footplate

Front spring tension
adjustment screw dial (New
Feature)

Domed Trademarked
D-Bar Europe Logo

Reinforced Polycarbonate
Design to keep your child
braced longer

Front spring tension
adjustment screws
(New Feature)

Aircraft Grade
Aluminum Bar

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.

● **Setting active spring tension.** Locate the number dial in the back of the spring housing, this will be your first adjustment. Unscrew the rear adjustment screw until the dial is released. Turn the green dial to the appropriate setting. Tighten this screw all the way to set the rear spring setting. Turn the bar over so you can see the D-Bar Logo. You will need to do the same set of steps to the front adjustment screw to set one side of the bar. Both the back setting dial and the front setting dial need to set to the same number. Repeat these steps on the opposite side of the bar to complete setting up the new Dobbs Bar.

● **Attaching Ponseti AFOs.** To attach the Ponseti AFOs you will need to locate the opening in the back of the AFOs. You will then slide each Ponseti Adapter into the opening in the back of each AFO. Each AFO will be correctly attached after you hear a "click" indicating the tongue and groove system are conjoined correctly.

Instructions for Use

The Dobbs Bar should be worn 23 hours a day for the first 3 months and then at night-time 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.*

Warning: Never use Loctite or other superglue based thread lock on the screws in the Dobbs Bar. The superglue/Loctite will react with the polycarbonate plastic and cause the plastic to weaken and break.