# A PARENT'S GUIDE TO THE FAB OTHERWISE KNOWN AS "THE DOBBS' BRACE" DESIGNED BY MATTHEW DOBBS, M.D.

## By Allison J. Grindon, St. Louis, MO

These pages are an addendum to the document "Ponseti Clubfoot Management: A Parent's Guide to the Foot Abduction Brace" by Naomi Powell & Kori Rush. Many of the "tips and tricks" provided in the former document apply to any Foot Abduction Brace, however you'll find here some additional tips that may pertain specifically to the Dobbs brace. If you have obtained this addendum without the preceding document attached you may contact the authors at <a href="https://nbbdud.edu">nbb@humbold.edu</a> or <a href="footware">footware</a> (footware"/footware</a> (footware"/footware"/footware</a> (footware"/footware"/footware</a> (footware"/footware"/footware"/footware</a> (footware"/footware"/footware"/footware</a> (footware"/footware"/footware"/footware"/footware"/footware"/footware"/footware</a> (footware"/footw



Hospital clubfoot message board at http://www.stlouischildrens.org/tabid/89/itemid/3992/Clubfoot-Message-Board.aspx.

The Dobbs' Brace has an articulating bar which allows the child to move his or her feet independently while still holding the feet at the proper degree of external rotation and maintaining the child's dorsiflexion. This brace may be fitted for your child with custom molded modified AFO's or the traditional Markell shoes. The main benefit of the Dobbs brace is in the flexibility it provides the child. You can see pictured here the way the child can move comfortably when walking, crawling and sleeping in the brace.



#### General Dobbs' Brace Tips

- Keep the bar well padded to avoid scratches from the clamps that hold the bar together. A piece of pipe insulation or a bicycle handlebar cover works well for this purpose.
- Consider making a cover from old socks or if you are handy, a piece of fabric and some Velcro will make a nice cover and protect you and your floors from the metal parts on the bar.
- When your child begins "cruising" or is nearing walking independently you

may want to ask about having "toe pads" added to the front of the shoes or



AFO's, creating a level surface for your child to walk on while wearing the brace.

If the screws/rivets that hold the articulating bar on the shoe plates ever breaks you can use a regular nut, washer and bolt from the hardware store to keep the brace in working order until you can get to your orthotics shop to have it repaired.

- ✦ For long pants I recommend those with snaps all the way down the legs, especially if you have the toe pads on the shoes. Closed pants legs are often not wide enough to slip over the toe pad and the shoe (think about trying to put your jeans on when you have your tennis shoes on) even if you remove the shoes from the bar to dress baby.
- The brace may be set up with stops that limit the articulation or movement, these may be added or removed as necessary depending on your child's needs.
- ✦ As with any FAB, bar length is important. If your child's FAB is too short or too long it may cause discomfort or be a culprit in giving the child leverage to get his/her feet out of the shoes. Bar length should be such that the shoes are set shoulder width apart. I have found that with the articulating bar, keeping the distance between the two pivot points equal to shoulder width is often the most comfortable (approximately the same as heel width). A great way to measure bar length is to set the shoes down and lay the child with his or her shoulders between the heels of the shoes. If the shoulders fit comfortably between the heels of the shoes then this is a good fit. If the shoulders are scrunched between the heels you may need to look into lengthening, or having your bar lengthened.





The shoes attach to the bar with the same sole plates that are used with the fixed length gold bar and you can see the degrees of rotation marked on the sole plates. Mark or have your orthotist mark the degrees of rotation so that if the screws come loose or you remove the shoes from the bar you can easily set them back to the correct position.

### Tips for using the Dobbs' brace with Markell shoes

- Most tips that apply to the traditional solid bars with Markell shoes will apply just the same when using the Dobbs brace with the shoes. A few that I've found most helpful include:
  - Cutting the tongue keeper slit to let the tongue sit down lower on the foot
  - Tying a knot in the center of the shoe lace to help keep the lace length even
  - o Putting an extra hole in the end of the strap to keep it from coming out when you put the shoes on
  - Putting the shoes on the brace so that the buckles are on the inside

#### Tips for using the Dobbs' brace with the modified AFO-style shoes

- The first thing to note about this style of shoes is that while traditionally AFO's are *not* a part of the Ponseti Method, the AFO-style shoes in this brace are mounted on the bar in order to maintain both proper dorsiflexion *and* external rotation; something that a conventional AFO alone cannot do.
- ◆ The benefits of the AFO-style shoes include soft comfortable inserts custom molded to baby's foot to hold the foot in position gently without causing the blisters and sores many parents have dealt with in the traditional shoes.
- Make sure that socks fit snugly and avoid wrinkles inside the insert. If there is any extra material you can blouse it out at the toes.
- ♦ The shoes are easy to put on with just a few steps:
  - 1. Place baby's foot in the soft plastic insert, making sure the heel is down and all the way to the back.
  - Place the tongue (also known as a "pringle") insert inside the front, over baby's instep. Try to smooth out any wrinkles in the socks under the tongue. (The tongue is optional depending on your child's needs.)



- 3. Now slide the foot into the hard plastic boot of the AFO. Much the same as you would apply the Markell shoes, bend the knee and press down on it to seat the heel well back into the AFO.
- 4. Place your thumb on the instep and apply pressure as you tighten the strap that goes over this area. **This strap is the most important.** If this strap is not tight your child's foot may slip in the AFO, thus not maintaining the dorsiflexed position.
- 5. Next, thread the other straps (there may be 2 or 3) through their respective hooks and tighten each of them.



- An additional option for the AFO style boot is a window in the back of the shoe to allow you to see that the heel is down.
- Socks with grippers on the bottom may help keep baby's foot from slipping in the insert. If slippage continues to be a concern, you can also "double sock". Put one sock on the baby's foot, then apply the molded insert and put another sock over it.
- Higher percent cotton fiber socks will help cut down on the perspiring that your baby's feet will do inside the shoes.





# HAVE HAPPY FEET!







For more information on the Dobbs brace as an option for your child please contact Dr. Dobbs at <u>dobbsm@wudosis.wustl.edu</u> or his nurse, Kristina Porter at <u>kporter@shrinenet.org</u> or <u>porterk@wustl.edu</u>. More information about O&P Labs, Inc. can be found at their website <u>http://www.oandplabinc.com/</u> or by contacting Dave Osterman at <u>dmosterman@oandplabinc.com</u>.

Author's comments: Please note that I am not a medical doctor; if you have questions or concerns about your child's treatment you should always seek the advice of a physician. For questions or comments about this page please contact the author at <u>jagrindon@yahoo.com</u>.