#### **Australian Distributor of UNFO**





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# UNFO Brace for Metatarsus Adductus (MTA): Treatment Guidelines for Professionals

#### Introduction

The UNFO box includes an extra strap, a user manual, and the UNFO BRACE. The application of the UNFO BRACE is strictly based on a doctor's recommendation. The UNFO BRACE is made up of three components: the brace body, the cushion, and the strap.

Before setup, it's important to reassure parents that the therapy will not cause pain for their baby. The typical duration for therapy ranges from six to eight weeks of continuous use, followed by an additional six to eight weeks of overnight therapy only.

The therapist is solely responsible for determining the therapy duration, depending on the severity of the case and the progress observed during treatment.

## **MTA Severity Checks**

Three types of parameters are evaluated to assess the severity of the condition:

- 1. Heels Bisector Classification This is assessed using a ruler according to Bleck's method. Position the ruler in the middle of the heel and observe the heel bisector line. The ruler should properly point to the second toe in a normally shaped foot.
  - o If the ruler points to the third toe, severity is low.
  - If it points to the fourth toe, severity is moderate.
  - o If it points to the fifth toe, severity is high.
- Flexibility of the Baby's Foot Hold the foot at the heel and attempt to move the upper part.
  - If you can achieve outward movement beyond a straight position ("over-repair"), flexibility is high, indicating low severity.
  - If only a "neutral" position is reached, severity is moderate.
  - If no neutral position is achieved, the severity is high.
- 3. **Medial Crease** The presence of a medial crease indicates that the foot will not return to normal without medical intervention.

### **Before Installing UNFO**

Prior to commencing therapy, it's advisable to take a photo of the foot to track progress.

Adjustments can be made to the UNFO BRACE based on the foot's shape.

The first adjustment might involve **enlarging the heel cage area**. The UNFO BRACE's heel support can be bisected to relieve pressure around the heel if the baby's foot is wide. This involves bisecting the heel cage and pulling on each side of the heel cage simultaneously in an outwards direction to stretch the soft thermoplastic material joining each side of the cage.

Another adjustment could involve **relieving pressure from the toe**. If the toe is angled upwards, pressure should be alleviated by repeatedly bending and stretching the soft thermoplastic material of the toe fastener upwards.

### **Installing UNFO Brace**

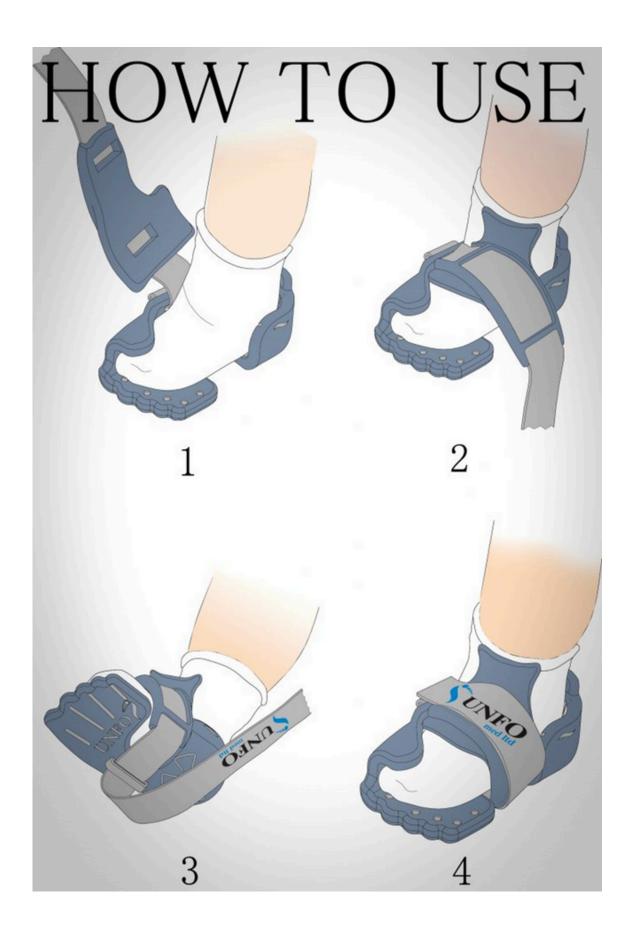
Before placing the UNFO BRACE on the baby's foot, ensure a sock is worn. The sock must be 100% cotton, snug, and free of folds, as folds may cause redness.

Follow these essential steps to treat the deformity:

- 1. Position the cushion closely against the brace body. Once aligned, hold the foot and place the heel securely in position. Lift the toe fastener and insert the remainder of the foot
- 2. Ensure the heel is tightly in contact with the end of the brace, and that the entire foot is snug against the bottom.
- 3. Adjust the cushion to center it on the foot, aligning it with the middle of the shin.
- 4. Securely embrace the foot and cushion together, eliminating any gaps. Thread the strap over the foot and brace body, ensuring it is not overly tightened. Proper tightening of the strap will secure the brace in place.
- 5. Once setup is complete, remove the brace from the baby's foot and encourage parents to practice the setup until they can do it correctly.

Outline how parents should handle the following weeks:

- On the **first day**, the brace should be removed every two hours for 10 minutes. After 10 minutes, it must be reapplied. The brace can remain on during the first night unless the baby cries without an identifiable cause; in such cases, remove the brace for the night and reapply in the morning.
- On the **second day**, continue with the same two-hour removal schedule until the evening bath. After the bath, initiate the first-two-weeks protocol.



- During the **first two weeks**, the brace must be worn 24 hours a day, removed only twice daily: in the morning for changing clothes and socks, and in the evening for a bath and clothes change.
- Two weeks after the initial installation, the patient should return for their first checkup.

#### Possible Side Effects

Inform parents about three **possible side effects** of the therapy and how to manage them:

- Slight foot redness is common and does not require special treatment.
- If the redness is severe, apply two pieces of medical paper Band-Aid on the affected area and continue therapy.
- If **bedsores or blisters** develop, often due to overly tight straps or improper setup, stop therapy for about two hours. Apply anti-irritation cream, cover the area with a Band-Aid, and resume therapy after two hours. If the condition worsens, consult the therapist.

If the baby removes the brace, verify that it was correctly set up. If so, consider wrapping the brace three times from the heel to the cushion using medical paper Band-Aid.



## **Therapist Monitoring Visits Guidelines**

Typically, depending on the severity and the therapist's instructions, the brace should be worn 24 hours a day for about 6 to 8 weeks, followed by 15 hours a day for 3-4 weeks, and then 12 hours a day for an additional 3-4 weeks.

A **first checkup** is recommended two weeks post-initial setup to assess therapy progress. If satisfactory, continue 24-hour therapy for an additional four weeks.

A **second checkup** should occur after six weeks of continuous therapy to determine if the patient can transition to 15-hour overnight therapy or continue with 24-hour therapy.

A **third checkup** is needed three weeks into 15-hour overnight therapy to assess whether to switch to 12-hour overnight therapy or continue with the current regimen.

If any regression in progress is observed, consider reverting to 24-hour therapy for an additional 2-4 weeks.

A **fourth checkup** should be conducted three weeks after implementing 12-hour overnight therapy to decide whether therapy can conclude or should continue.