

## The Use of Bracing in Podiatric Practice



**By Dr. Barbara Campbell, Medical Director for ComfortFit Labs**



How many times in your daily practice are you confronted with a patient who could, in your opinion, benefit from some type of bracing system (AFO) to treat his/her chronic podiatric condition? An ankle foot orthosis (AFO) may be a particularly appropriate and reasonable option for care, particularly if the patient is not a good surgical candidate and conservative options have not

and musculoskeletal components, being particularly mindful of general medical conditions and previous history that is affecting the lower extremity. A weight bearing and non-weight bearing biomechanical exam as well as an evaluation of the patient's gait are part of the comprehensive exam. The gait analysis is critical especially when you are looking to determine the severity of the deformity and subsequent disability that is beyond treating with a standard custom foot orthosis. Weight bearing x-rays can also be helpful to determine the extent of

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been fully explored. The implementation of bracing into a podiatric practice is no more difficult than casting and prescribing for standard custom orthotic devices.

Common diagnoses that can be successfully treated with AFOs are acute ankle sprains, chronic ankle instability, foot drop, adult acquired flatfoot, posterior tibial tendon dysfunction, Charcot deformity, chronic tendinopathies, and degenerative joint disease of the ankle, to name a few. There are of course times when OTC braces are somewhat useful but when more chronic diagnoses and substantial deformities are present a custom device is in order. Light weight and low-profile designs of current braces available in the market allow for better shoe fit and selection as well as improved compliance in acute care and long-term treatment and maintenance.

After deciding that you would like to treat the patient's condition with a custom AFO it is essential to educate the patient about their diagnosis(es) and how a brace will treat their complaints. Details of shoe selection, activity level, patient expectation, and occupation are important discussion points.

### History and Physical Exams

History and physical examinations are critical for all biomechanical treatment interventions. Always take a complete medical and surgical history including pertinent conditions (post CVA, OA, etc.) and the occurrence of trauma and previous treatments, paying particular attention to musculoskeletal and nerve trauma. Note general musculoskeletal issues such as scoliosis, leg length discrepancy, etc., as they are important factors. A thorough physical examination of the lower extremity involves vascular, dermatologic, neurological



Standard Richie Brace



Lateral Arch Suspender

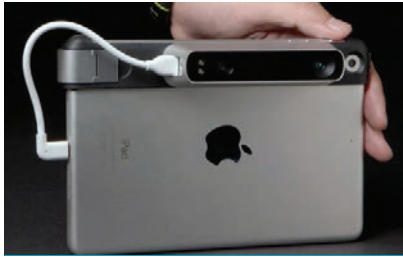
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deformity. The podiatrist should take adequate time to evaluate the levels of deformity and disability in the patient.

Here are a few examples of appropriate brace selection for the diagnosis. The Richie Brace website ([www.richiebrace.com](http://www.richiebrace.com)) offers a detailed treatment guide that can help in the appropriate device selection. Videos reviewing techniques for casting are also available.

### Selecting the Appropriate AFO

The Standard Richie Brace is used to treat mild to moderate PTTD and chronic ankle instability. The device



Digital Casting Now Available

## Use of Bracing *(continued)*

controls the first ray, MTJ and STJ as well as calcaneal inversion and eversion. It allows for unrestricted sagittal ankle motion. The Arch Suspender has two available options. The Medial Arch Suspender treats moderate to severe PTTD and Stage II or III PTTD with subluxed TNJ. The adjustable lifting strap under the TNJ helps to resist collapse of the medial arch as well as eversion of the ankle and hindfoot. The Lateral Arch Suspender treats peroneal tendinopathy, severe lateral ankle instability and fixed varus deformity of the hindfoot and ankle. The adjustable lifting strap under the CCJ resists inversion of the ankle or hindfoot.

Patients can have successful conservative management of their chronic conditions when bracing systems are correctly selected. Accurate detailed medical history, physical examination which includes evaluation of gait, patient education and effective discussions regarding the specifics of the treatment plan are all critical points to achieving a successful outcome. Bracing requirements and types can often require modifications or a complete change due to the progressive nature of a condition. Bracing prescriptions are typically unilateral so some type of compensation insert should be provided in the contralateral shoe. In most cases the removal of the insole of the brace shoe will allow proper fitting of the brace without increasing a limb length discrepancy.

I challenge my podiatric colleagues to educate themselves on the importance and value this type

of conservative treatment offers and implement it into their treatment armamentarium. It can be greatly beneficial to your patients and your practice. **ComfortFit Orthotic Labs** is a partner with the Richie Brace and

both companies are always there to assist doctors with their questions and concerns.

*Questions are welcome as we are here to help. Please call 888-523-1600, visit our website at [comfortfitlabs.com](http://comfortfitlabs.com), or click here.*