

## HISTORY

The Richie Brace® was designed and introduced to the medical community in 1996 by sports podiatrist, Dr. Doug Richie. Since that time the Richie Brace has become a gold standard treatment in the orthotics industry. It is universally recognized by podiatrists, pedorthists, orthotists and orthopedic surgeons as a unique, breakthrough technology to treat a wide variety of foot and ankle pathologies. Many imitations have followed, but none have achieved the fit, comfort and clinical success of the Richie Brace.

### UNIQUE FEATURES

#### Fit and Comfort

The Richie Brace is lighter than most custom ankle-foot orthoses. The leg uprights are designed to leave the front and back of the leg open for breathability and comfort. Once the Richie Brace is positioned on the foot and leg and the Velcro straps are adjusted, the user is hardly aware they are even wearing it.

#### Easy Application and Removal

After initial adjustment of the three straps, daily application and removal of the Richie Brace involves the simple opening and closing of one single strap. All of the straps of the Richie Brace can be easily and in-expensively replaced without the need for rivots or glues.



*Medial and lateral placement of limb uprights do not affect shoe fit. The Richie Brace can be applied and removed by adjusting a single strap.*

*Leg uprights positioned for maximum comfort and shoe fit*

*Anatomic ankle axis hinge placement.*

*Custom balanced contoured orthotic footplate.*

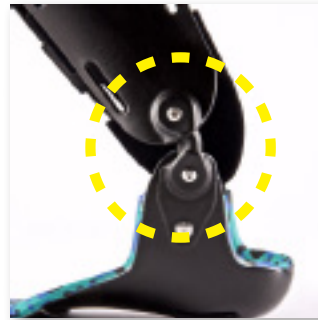
## THE RICHIE BRACE® - Standard

#### Features:

- Custom Balanced Foot Orthotic
- Standard 35mm Heel Cup fits into the bottom of the heel counter of the shoe
- Anatomic Ankle Axis Hinge Placement
- Semi-rigid lower limb supports
- Custom contoured footplate attachment

#### Benefits:

- Control of First Ray, Midtarsal and Subtalar joints
- Control of Calcaneal inversion/eversion
- Pure, unrestricted sagittal ankle Motion
- Thin posterior plastic shell allows optimal shoe fit
- No need to increase shoe size



Tamarack TM Dorsiflexion Assist Flexure Joints



Custom molded orthotic foot plate



Before



After

## THE RICHIE DYNAMIC ASSIST BRACE

*"A dorsiflexion-assist AFO for Dropfoot Conditions"*

### Description:

The Richie Dynamic Assist Brace is a custom articulated ankle-foot-orthosis with two spring-like hinges, medial and lateral, to provide up to 15 degrees of dorsiflexion of the foot at the ankle joint during the swing phase of gait.

### Clinical Indications:

The Richie Dynamic Assist Brace is indicated for the stabilization of the foot and ankle in patients with weakness of the dorsiflexor and evor muscles of the lower leg. This presentation may be the result of:

- Post CVA (stroke)
- Mild Muscular Dystrophy
- Charcot Marie Tooth Disease
- Post Spinal Cord Surgery
- Diabetic Neuropathy

### Brace CAN be used if patient has:

- Adducto-varus foot deformity
- Diabetic Charcot deformity without severe equinus
- Body weight over 200 pounds

### Features:

- Custom Balanced Foot Orthotic
- 35mm Heel Cup
- Anatomic Ankle Axis Hinge Placement
- Semi-rigid lower limb supports
- Custom contoured footplate attachment
- Tamarack® flexural ankle joints

### Benefits:

- Dynamic dorsiflexion-assist
- Control of varus/valgus alignment of the foot
- Pure, unrestricted sagittal ankle Motion
- Optimal shoe fit

### Brace is indicated for patients with:

- Partial or complete dropfoot

### Brace is NOT indicated for patients with:

- Spasticity of plantar flexors or invertor muscle groups
- Moderate to severe varus/valgus deformity of hindfoot
- Severe equinus (ankle dorsiflexion zero degrees or less)
- Unstable knee

## RICHIE SOLID ANKLE AFO BRACES:



### THE RICHIE CALIFORNIA AFO BRACE

#### Clinical Indications:

- Rigid, non-reducible Adult Acquired Flatfoot (Stage III & IV)
- Severe DJD or Deformity of hindfoot
- Charcot Anthropathy

#### Features:

- Adjustable Leather Closure over tibia & forefoot
- Patented Medial or Lateral Arch Suspender
- Rearfoot Stabilizing Post
- Continuous single strap closure-no laces.
- A gauntlet AFO without laces.

#### Benefits:

- Total restraint of foot and ankle movements
- Self-adjusting arch support
- Prevents medial / lateral instability



### THE RICHIE SOLID AFO BRACE

#### Clinical Indications:

- Severe Dropfoot-Spasticity
- Charcot Anthropathy

#### Features:

- Balanced functional orthotic footplate
- Rearfoot post
- Extended forefoot padding

#### Benefits:

- Correction of varus/valgus forefoot deformities
- Control hindfoot inversion/eversion
- For comfort and accommodation of plantar lesions



## THE RICHIE GAUNTLET BRACE

### Features:

- Medial and Lateral Arch Suspender: Legitimate Varus/Valgus control of the hind foot
- Fulfills true definition of Code L2275
- Neutral Suspension Casts Accepted: No need for casting boards!
- Non-weight bearing cast provides better heel and arch contour
- All casts are intrinsically balanced to correct forefoot varus/valgus deformities

### Clinical Indications:

- Rigid, non-reducible Adult Acquired Flatfoot (Stage III & IV)
- Severe DJD or Deformity of hindfoot
- Charcot Arthropathy

\*US. Patent No. 6,602,215

## REFURBISHED PARTS AND ACCESSORIES



All Richie Braces can be easily refurbished in the doctor's office in minutes with no need for special equipment. The replacement straps and pads are available in a Richie Brace refurbishment kit which can be ordered from any distributor. This refurbishment service is reimbursed by most third party payers.



*Fixed Back Strap option for additional control of dropfoot conditions.*

## RICHIE OTC PRE-FABRICATED BRACES:



### THE RICHIE OTC ANKLE BRACE

#### Clinical Indications:

- Acute Ankle Sprain
- Tendinopathy of the Foot and Ankle
- Interim brace before custom AFO

#### Features:

- Prefabricated orthotic footplate in 4 sizes
- Full flexion ankle joints or restricted hinge ankle options
- Adjustable Velcro strap closures

#### Benefits:

- Powerful footplate control over the ankle and hindfoot
- Economical on-the-spot treatment of acute injuries
- Interim brace before custom AFO



### THE RICHIE OTC DYNAMIC ASSIST

#### Clinical Indications:

- Dropfoot secondary to CVA or nerve injury
- Peroneal tendinopathy
- Tibialis Anterior tendinopathy

#### Features:

- Tamarack™ dorsiflexion assist flexure joints
- Prefabricated contoured orthotic footplate
- Lightweight adjustable leg uprights

#### Benefits:

- On-the-spot treatment of ankle conditions accompanied by weakness of tendons or ligaments
- Economical, on-the-spot treatment
- Interim brace before custom AFO

## CASTING OVERVIEW

The Richie Brace requires a negative impression cast utilizing either plaster splints or the STS Casting Sock. Neutral suspension technique is recommended while plantarflexing the First Ray. Complete casting instructions are available at [www.richiebrace.com](http://www.richiebrace.com).



*Foot held 90° dorsiflexed. Mark foot according to printed instructions*



*Apply plaster strip #1.*

*Form a slipper cast with splint #2.*



*Complete with splint #3 and lay over the tip of the toes..*



*Lock midtarsal joint and plantarflex the first metatarsal.*

*Remove cast following proper guidelines.*



**Casting using the STS Sock.**

*Lay cutting strip down. Lay down cutting channel. Place plastic bag over foot and leg. Apply STS sock following instructions carefully.*



*Mold sock. Lock midtarsal joint and plantarflex the first metatarsal.*

## MODIFICATIONS OF THE STANDARD RICHIE BRACE



### Restricted Hinge Pivot

A more rigid ankle articulation restricts ankle dorsiflexion and plantarflexion to a range under 5 degrees without disrupting a smooth contact and heel rise phase of gait. This model is suited for treatment of severe PTTD, mild dropfoot conditions as well as degenerative arthritis of the ankle and hindfoot.

## ARCH SUSPENDERS



### Medial Arch Suspender

A patented innovation\* provides an adjustable lifting strap under the talo-navicular joint to resist collapse of the medial arch as well as eversion of the ankle and hindfoot. This modification is indicated for severe PTTD and severe pronation disorders of the hindfoot.

*\*US Patent No. 6,602,215*



### Lateral Arch Suspender

A patented innovation\* provides an adjustable lifting strap under the calcaneal-cuboid joint to resist inversion of the ankle or hindfoot. This modification is indicated for Peroneal Tendinopathy as well as Varus deformity of the ankle and hindfoot.

## RICHIE AEROSPRING BRACING SYSTEM:

INTRODUCING THE

Richie  
**AeroSPRING**  
BRACING SYSTEM®



**A new Richie system replaces walking boots and treats a variety of lower extremity pathologies.**

**Its simple Better!**

### **The AeroSpring Systems have 3 components:**

1. A pre-fabricated carbon fiber composite ankle-foot orthosis which contains a full length footplate, a lateral strut around the ankle and an anterior strut along the tibia. The proximal section of the AFO contains a contoured plate with tibial relief cut out, padding and 2 adjustable anchor straps.
2. A pair of custom functional foot orthoses. One orthosis is "married" to the footplate of the AFO brace and the other orthosis is worn in the contralateral shoe without an AFO brace. The orthoses are custom, intrinsically balanced functional foot orthoses which are fabricated with a semi-rigid crepe shell material and vinyl top cover. All foot orthoses incorporate the patented Richie ArchLock™ \* technology.
3. Heel wedges to neutralize damaging forces on the Achilles, Plantar Fascia and Midfoot joints.

\*US PatentNo. 8,683,717

## INDICATIONS AND FEATURES OF THE AEROSPRING SYSTEM

### Midfoot Offloading System



**Indications:**

- Midfoot sprain
- Lisfranc fracture/dislocation

**Features:**

- AeroSpring brace system offloads the deforming force of the Achilles tendon acting across the midfoot joints
- Midfoot joints protected and immobilized with custom foot orthosis and rigid carbon fiber footplate

### Plantar Fascia Offloading System



**Indications:**

- Chronic Plantar heel pain due to plantar fasciopathy

**Features:**

- AeroSpring brace system offloads the 3 deforming forces on the Plantar fascia:
  - Offloading of Achilles with carbon fiber AFO and heel wedges
  - Offloading the windlass via carbon footplate
  - Offloading the plantar fascia with custom foot orthosis and ArchLock technology

### Dropfoot Stability System



**Indications:**

- Lower leg weakness and neurologic conditions which cannot be addressed with the Richie Dynamic Assist Brace

**Features:**

- Carbon fiber AFO brace to control foot drop during swing phase of gait
- Carbon fiber footplate with toe spring to aid in push off during third rocker of gait

### Achilles System



**Indications:**

- Tendinopathy of the Achilles tendon
- Non-surgical management of the Achilles tendon rupture
- Post surgical management of the Achilles tendon rupture

**Features:**

- Carbon fiber AFO offloads the Achilles
- Heel wedges provide incremental lift up to 30 mm
- Custom foot orthoses control rearfoot motion





### Richie Brace - Standard

- Mild to moderate PTTD
- Lateral Ankle Instability

#### Casting:

- Ankle casting sock



### Dynamic Assist

- Ideal brace for Dropfoot
- Cannot be used in:
  - Equinus, Spasticity and unstable knee or significant frontal plane deformity (varus, valgus)

#### Casting:

- Ankle casting sock



### Richie Brace - Restricted Hinge

- DJD of Ankle or rearfoot
- Dropfoot - Mild
- Dropfoot with arus/valgus deformity
- Dropfoot with spasticity
- Unstable knee

#### Casting:

- Ankle casting sock



### Richie Gauntlet

- Rigid, non-reducible Adult Acquired Flatfoot (Stage III & IV)
- Severe DJD or Deformity of hindfoot
- Charcot Arthropathy

#### Casting:

- Mid leg casting sock



### Medial Arch Suspender

- Moderate to severe PTTD
- Stage II or III PTTD with subluxed T-N Joint

#### Casting:

- Ankle casting sock



### California AFO

- Gauntlet brace without laces
- Severe Deformity: Stage IV PTTD
- Charcot Deformity
- Severe DJD of ankle or hindfoot

#### Casting:

- Mid leg casting sock



### Lateral Arch Suspender

- Peroneal tendinopathy fixed varus deformity of hindfoot/ankle
- Severe Lateral ankle Instability

#### Casting:

- Ankle casting sock



### Richie Solid AFO

- Severe Dropfoot - Spasticity
- Charcot Arthropathy
- Dropfoot with unstable knee

#### Casting:

- Full leg (Bermuda) casting sock

## RICHIE AEROSPRING BRACES



### Little Richie

Pediatric brace for ages 5 -12

- Severe pes valgus
- Idiopathic toe walking (Restricted hinge)

Casting:

- Plaster or fiberglass model or scanned image of foot and lower leg



### Richie OTC Ankle Brace

Prefabricated Ankle Brace for:

- Acute ankle sprain
- Tendinitis of ankle, Interim Brace before custom AFO treatment

No casting necessary

- Order by left/right - S, M, L and XL



### Soccer Brace

Standard Richie Brace with built-in shin guard

- 14 mm heel cup for optimal fit in soccer cleat
- Indicated for Chronic ankle instability

Casting:

- Ankle casting sock



### Richie OTC Dynamic Assist

- Paralysis or Weakness of Ankle Muscles
- Peroneal or Tibialis Anterior Tendinopathy

No casting necessary

- Order by left/right - S, M, L and XL



### AeroSpring Achilles Tendon Offloading System

- Tendinopathy of the Achilles tendon
- Non-surgical management of the Achilles tendon rupture
- Post surgical management of the Achilles tendon rupture

Casting:

- This system requires bilateral slipper casts for the pair of custom foot orthotic components



### AeroSpring Plantar Fascia Offloading System

- Chronic Plantar heel pain due to plantar fasciopathy

Casting:

- This system requires bilateral slipper casts for the pair of custom foot orthotic components.



### Richie Drop Foot Stability System

- Lower leg weakness and neurologic conditions which cannot be addressed with the Richie Dynamic Assist Brace

Casting:

- This system requires bilateral slipper casts for the pair of custom foot orthotic components



### Richie AeroSpring Midfoot Offloading System

- Midfoot sprain
- Lisfranc fracture/dislocation

Casting:

- This system requires bilateral slipper casts for the pair of custom foot orthotic components

# SCANNER



## Scanner

All of the custom Richie Brace® models can now be fabricated from a scanned image taken of the patient's foot and ankle. Using the Structure Sensor® scanner attached to an iPad®, the practitioner can take a 3-D scan of the lower leg and foot and then transmit the data to an authorized Richie Brace lab distributor for fabrication of any custom Richie Brace®.



For further information, please visit our website: [www.richiebrace.com](http://www.richiebrace.com)

*The Richie Brace is only available through an authorized distributor.*