QUEENSLAND ORTHOTIC LAB

Richie AeroSpring

Plantar Fascia Offloading System

Clinical Indication:

- ❑ Severe recalcitrant plantar heel pain syndrome
- ❑ Plantar fascial tear

Plantar fascia offloading

Features:

- ❑ Carbon fibre ankle foot orthosis - controls ankle joint dorsiflexion and load on the Achilles tendon
- ❑ Custom functional foot orthosis (one pair) - controls rearfoot pronation, patented Richie ArchLock™ offloads the medial-central band of the plantar fascia
- ❑ Graduated Heel Wedges - Offloads both Achilles tendon and the central band of the plantar fascia

Mechanism:

During standing and walking, the plantar fascia is subjected to elongation strain by:

- ❑ the Achilles tendon located immediately proximal
- ❑ the "tie rod" component of the truss mechanism of the arch
- ❑ the tension created by the windlass mechanism at the first metatarsophalangeal joint

With severe recalcitrant cases of chronic plantar heel pain, clinicians often prescribe walking boots which address some, but not all of these damaging mechanisms. Walking boots have numerous disadvantages which lead to poor patient compliance:

- ❑ limb length discrepancy causing hip and back pain
- ❑ bulky and heavy causing knee pain
- ❑ need for removal when driving an automobile

A brace system has been developed to simultaneously address all three loading mechanisms of the plantar fascia. The result is a three prong approach to minimize the mechanical strain on the plantar fascia during standing and walking.

Superior to walking boots, the Richie AeroSpring Plantar Fascia Offloading System addresses the biomechanics of foot function to reduce strain on the plantar fascia. A custom balanced orthotic foot bed contours to the medial and lateral longitudinal arches. Heel wedges combined with the

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shank contour of the foot orthoses has been documented to offload the central band of the plantar fascia. The patented Richie ArchLock™ offloads the medial-central band of the plantar fascia.

Compared to walking boots, this dynamic brace system does not create a limb length discrepancy and can be easily dis-engaged for driving an automobile.

The Richie AeroSpring Plantar Fascia Offloading System therefore addresses all three levels of mechanical strain on the plantar fascia, unlike any orthotic system on the market today. The comfort and dynamic spring effect of this system will assure better patient compliance than any other offloading device available.

How to order:

Scanning:

- ❏ Take a scan of both feet (same as your foot orthotic scans)
- ❏ Email the scans along with a completed order form to info@qol4feet.com.au

Casting:

- ❏ Take a cast of both feet (same as your foot orthotic casts)
- ❏ Send the casts along with a completed order form to:
  QOL, 1/10 Christine Place, Capalaba, QLD, 4157

References

The first orthotic system to simultaneously address the three major deforming forces on the plantar fascia. These studies verify the deforming forces contributing to plantar fasciopathy and plantar heel pain:

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