

Exploring Orthotic Indications For Various Conditions

In this edition of "Orthotics Q&A," the panelists discuss various issues ranging from indications for the Richie Brace, Arizona AFO and prefabricated orthoses to whether orthotic casting should reduce supinatus. Without further delay, here is what the panelists had to say.

Q: What are the indications for using a Richie brace versus using an Arizona brace?

A: For Doug Richie Jr., DPM, each custom ankle foot orthotic (AFO) has a different clinical indication and choosing one to treat a pathology is the same as choosing a surgical procedure. He notes the rigid Arizona AFO has a molded leather gauntlet that completely

restricts movement in the midtarsal, subtalar and ankle joints. Applying an Arizona AFO provides the same effect as a pantalar arthrodesis, according to Dr. Richie. He adds that the device is indicated for severe end-stage posterior tibial tendon dysfunction (PTTD), Charcot arthropathy and severe degenerative joint disease (DJD) of the ankle.

In contrast, the Richie Brace is functional and designed to limit but not completely restrict rearfoot and ankle motion, notes Dr. Richie. He says the indications for the Richie AFO include reducible flatfoot deformity, tendinopathy and moderate hindfoot and ankle DJD. In addition, Dr. Richie notes the brace is

indicated as a functional brace to treat lateral ankle instability in active patients.

When treating adult-acquired flatfoot without ankle joint arthritis, Marque Allen, DPM, prefers the Richie brace over the Arizona brace. He cites the Richie brace's functionality due to its ankle joint and full-length orthotic. Dr. Allen says these characteristics permit the balancing of forefoot varus and facilitate the reestablishment of the foot's functional tripod. One can accordingly balance the foot as opposed to using a rigid constraint to stabilize the deformity, according to Dr. Allen.

"I also find the Richie brace to be more user-friendly," notes Dr. Allen. "Its ease of application and the ability to wear it with a greater variety of 'normal' shoes is increased."

Richie braces work "very well" for most patients with foot and ankle deformities that are not severe, according to Bruce Williams, DPM. He uses the Richie brace for about 90 percent of patients with PTTD and other patients with chronic ankle or subtalar joint (STJ) arthritis.

When treating a patient with more severe triplanar deformities or severely overweight patients, Dr. Williams suggests using an Arizona AFO or a fixed brace. He says the Richie brace is not strong enough at the hinge area to accommodate all patients' weights. However, Dr. Williams cautions that the more severe deformities are too hard to control with a non-rigid controlling device like an Arizona AFO.

Q: What are the indications for prefabricated orthotics?

A: One can use prefabricated orthotics for acute to subacute overuse injuries of the foot and ankle, according to Dr. Allen. He says prefab orthotics are an adjunct to an overall



Dr. Richie notes the Arizona AFO (shown above) is indicated for severe end-stage posterior tibial tendon dysfunction (PTTD), Charcot arthropathy and severe degenerative joint disease (DJD) of the ankle.

