insensate Charcot foot because the hard, rigid thermoformable plastic presents an increased risk to an already damaged and insensate foot in the warm, dark, moist, confined environment of the shoe: a breeding ground for bacteria.

The type of orthotic device used depends on the extent of the Charcot foot injury presented during the clinical evaluation and any other complications present. Orthotic appliances include the custom-molded, rigid-leather, lace-up ankle gauntlet, such as the Arizona brace or total-control AFO; Charcot restraint orthotic walker (CROW boot); a custom-molded shoe modified with an insensate orthotic insert, high toe box, rocker sole, and lateral T-strap coupled with a single or bilateral metal upright AFO attached to it; a patellar-tendon-bearing (PTB) AFO is also an option.

Encouraging the patient to regularly wear shoes and stockings is the first line of defense since that protects the foot against external environmental hazards. The more physically active the person is, the more such protection is needed. However, the warm, dark, moist, confined environment of an orthopedic or custom-molded shoe or a CROW boot worn throughout the day, seven days a week, becomes a breeding ground for bacteria on the already compromised, sometimes ulcerated soft tissues of the foot. If the person is less active or uses an assistive device such as a wheelchair for mobility, the protection afforded by shoes become less essential, thus a suitable alternative may be used—especially when infection becomes a primary concern.

A Hybrid Option

There are also times when a hybrid type of orthosis is called for. This type of orthosis incorporates the optimal features of one type into another for a unique, functional purpose and effect to prevent, for example, the infection of an ulcer. An example of a hybrid orthosis is provided in the following case study.

The orthotic and prosthetic department at the Bruce W. Carter Department of Veterans Affairs (VA) Medical Center in Miami, Florida, under the direction of Tomas G. Dowell, CPO, LPO, incorporated the use of a hybrid orthosis—an open-toe healing sandal attached to a solid ankle AFO—for a 70-year old patient with bilateral Charcot deformities. The patient is obese, has diabetes and venous stasis, and presented with additional challenges including edema, reduced mobility, hammer-toe deformities, and hallux valgus and rigidus. A plantar wound