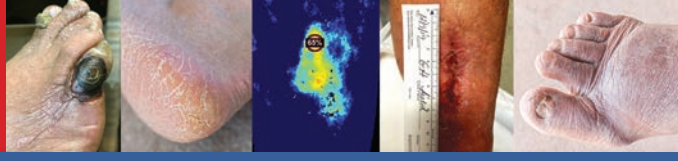

DME for Partial Foot Amputations

These devices can restore function and improve patients' quality of life.

BY PAUL KESSELMAN, DPM

The last issue of the year for *Podiatry Management* is typically dedicated to diabetes. Consistent with that, this article will expand on this issue's article on PFA (partial foot amputation) written by Jeanette Smith (page 83).

Devices typically used for patients with PFA range from stuffing a block of materials (toilet tissue, paper towels, rags, etc.) into the toe box of the shoe to a sophisticated hybrid lower extremity prosthetic prescribed by a physician. This article will provide some basic information on why it is important to provide the proper device and the three typical types of prosthetics available to your PFA patients.

The consensus of healthcare providers is that many of the patients who have a PFA (e.g., TMA or Chopart's) are not properly fitted with the correct appliance. Many of these patients suffer from biomechanical issues which are either magnified by the PFA, were pre-existing to the PFA and/or are new post-PFA.

Performing a thorough biomechanical evaluation on every patient with a PFA (new or established) as well as the residual limb is the first step in deciding which device is appropriate. The patient with a new PFA will likely have very different pre- vs. post-PFA biomechanics. The intact limb will also have vastly different biomechanics than the PFA side. Ultimately, the prescriptions for all the involved orthotic/prosthetic devices for both the intact limb vs. the residual limb and the shoes for each limb will be quite unique.

The use of "stuffing" materials by patients or recommended by physicians (who don't recognize the need for prosthetics) to reduce slippage of the PFA foot in the shoe is still quite prevalent. The resulting hyperkeratosis and shear resulting at the stump often causes increasing pressure resulting in pain on patients with intact sensation. Given sufficient time, this may stimulate bone spicule regrowth near or at the stump line. Re-ulcerations with return to the OR are thus not uncommon in patients with simple "stuffing" solutions and can result in higher levels of amputations.

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With the level of sophisticated devices available, it is abhorrent for any surgeon, regardless of their degree, not to refer a PFA patient to a competent colleague (fellow podiatrist, rehabilitation specialist, orthotist, or prosthetist) for a post-amputation evaluation of the patient's orthotic/prosthetic and footwear needs.

As to "real" solutions, all the prosthetic devices presented are subject to the coverage provisions of the Lower Limb Prosthetic LCD of your DME MAC. These devices are not subject to either the AFO or Therapeutic Shoe Policy LCD requirements.

Toe Fillers

The simplest and often effective device is a toe filler, which essentially is a foot orthotic with a shell composed of the materials of your choice (normally a polypropylene-type shell) and EVA, a mid-density material midsole (e.g., Poron) and a top cover of low durometer accommodative material (Plastazote). The prescription is best based on the patient's weight, functional issues, and a myriad of other factors considered when prescribing a foot orthotic. It contains a distal block of material which makes up for the lack of the missing forefoot.

This device can be primarily accommodative but can also have some functional corrections such as postings and stiffer carbon fiber materials built in. These are added to provide reactionary forces to residual biomechanical pathologies (such as simple equinovarus deformities)

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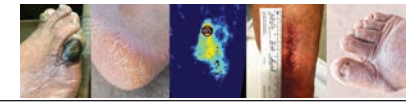

Amputations *(from page 103)*

resulting from the PFA. Certainly, if the PFA side is short due to unequal limb syndrome, either the device or shoe can be properly modified to "equalize" the limb lengths. This device is typically described as an L5000.

Pathologies which either fail to respond to a simple toe filer and/or be initially found to be more complex, such as a multiplanar equinovarus and/or mixture of other deformities, can be addressed with two other prosthetic devices for PFA patients.

Supra-Malleolar Orthotic with a Toe Filler (L5010)

The first is a combination of a supra-malleolar orthotic with a toe filler. This device typically is composed of a polypropylene shell lined with a soft tissue interface, ending distally with a toe filler (as with the simple orthotic/insert filler). This type of device often works when simple toe fillers do not and the patient has a simple two-plane deformity and/or is short (under 5'5") and/or weighs less than 200 pounds. A one strap closure above the superior line of the shoe is usually necessary.

AFO-Type Supra-Malleolar Orthotic with a Toe Filler (L5020)

Patients with more complex or refractory biomechanical issues, or whose height exceeds 5'5" and/or weight exceeds 200 pounds, or who are highly active, most often require a device where the shell extends more proximally to just below the knee, similar to a traditional AFO. This lengthened device provides a longer lever arm, which provides superior functional control of the lower extremity. This device will typically require a minimum of two straps to secure it to the leg, one near the proximal margin and the other just superior to the ankle.

All three devices can also be fitted with posts and/or lifts to equalize any limb length deformity, and the shells can be accommodated (blown out) for osseous prominences. The supra-malleolar and below-knee devices will often have their shells padded with a soft tissue interface, as these patients are high risk and have soft tissue atrophy issues requiring padding. Top covers can be added to the foot plate of both the supra malleolar and below-knee prosthetic toe fillers.

The shell of the supra-malleolar device can be described as L5010, whereas the shell of the below-knee prosthetic can be described as L5020.

The shell of the supra-malleolar device can be described as L5010, whereas the shell of the below-knee prosthetic can be described as L5020. The filler portion of these devices is integral to L5010/L5020 and is therefore not separately coded. Top covers are not separately reimbursed.

Impressions for these devices are best done with either scanning or plaster casting so the stump can be accurately captured in the negative cast. Impressions can be accomplished by your choice of semi-weight-bearing on a foam cushion or in subtalar neutral. It is important to provide the laboratory with an additional tracing around the stump with the patient in both semi- and full weight-bearing positions. Additionally, it is advisable to provide as much information about the shoe (make and model) as possible. In some cases, sending the shoe(s) to the laboratory is advisable. A small hand-operated drill with a rotary burr is often necessary at the time of dispensing to facilitate proper fitting to the stump and to better fit the shoe.

Patients need to be instructed about appropriate footwear during the initial discussions about these devices. Clinical staff should advise patients to use shoes with similar dimensions and with a Blucher (lace cage) type shoe which easily opens wide to facilitate placement and removal of the prosthetic.

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These three prosthetic devices are not required to be PDAC validated, though some manufacturers may choose to do so. They are also not subject to the archaic regulations of the Therapeutic Shoe Program for Beneficiaries with Diabetes nor is the use of these devices limited to reimbursement for patients only with diabetes; i.e., patients with PFA resulting from traumatic injuries, vascular disease, etc. are usually covered for PFA prosthetics by Medicare and other third-party payers.

Coverage for PFA is usually restricted to patients missing the complete forefoot. Consideration may also be given to patients with lesser levels of amputation (e.g., partial first ray or multiple lessor rays), if one can document that the patient suffers from significant gait instability due to sustained anatomical loss. On the other hand, the loss of a single fifth toe or partial distal hallux amputation is not likely to be considered to have met the medical necessity burden for coverage for a PFA prosthetic.

Documentation of medical necessity in your chart containing the elements of the Standard Written Order (SWO) is necessary. No separate SWO is required if you are both the prescriber and supplier, but the elements of the SWO must be documented in your chart.

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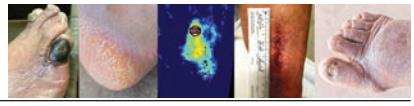

Amputations *(from page 104)*

Prosthetic devices are not subject to the archaic five-year look-back (Same and Similar) rules of ankle foot orthotics. That is, if a patient had an AFO and now needs to switch to a lower limb prosthetic, or previously had a lower limb prosthetic and a new one is deemed medically necessary, the claim should not automatically kick out due to Same and Similar. Replacement of lower limb prosthetics are subject to medical necessity issues only, which should be clearly documented.

Claims subject to review will need to provide sufficient evidence to support the need for a replacement or new device. That is, Medicare will not reject a claim for a prosthetic simply because of a time element. Other third-party payer rules regarding lower limb prosthetics and replacements are widely variable. It is best to perform both pre-determination of benefits and prior authorization inquiries prior to fabrication of these prosthetic devices.

Prosthetic devices are not subject to the archaic five-year look back (Same and Similar) rules of ankle foot orthotics.

Jeanette Smith's article in this issue states that patients with PFA often fail to receive prosthetic devices. That is quite unfortunate as research in the material sciences for all types of prosthetics continues to make great advances. Patients with PFA deserve a high level of attention to prosthetic design. Proper fitting prosthetics of patients with PFA can restore their gait and activity levels to near pre-amputation levels, improving their quality of life and reducing the risks of further limb loss. **PM**

Dr. Kesselman is in private practice in NY. He is certified by the ABPS and is a founder of the Academy of Physicians in Wound Healing. He is also a member of the Medicare Provider Communications Advisory Committee for several Regional DME MACs (DMERCs). He is a noted expert on durable medical equipment (DME) for the podiatric profession, and an expert panelist for Codingline.com. He is a medical advisor and consultant to many medical manufacturers.