Orthotics & Biomechanics

Orthotic Therapy in Tough Economic Times

The key to success lies in how you present these devices to patients.

By Lawrence Huppin, DPM

Presenting Orthotic Therapy to Your Patients and Dealing with Confusing Arch Support Advertising

The recession has impacted all elements of the economy, including healthcare. Walgreen's has reported a 10% drop in prescriptions indicating that fewer people are visiting physicians. Patients are delaying elective healthcare. The patients who do come in are more careful about where their dollars are spent. Since at least a portion of orthotic therapy charges are often paid by the patient, many are delaying orthotic treatment or trying to find less expensive options than custom orthoses to treat their pathologies.

Delaying treatment, however, is often to the patient's detriment. In many cases, orthotic therapy is the most clinically effective—and cost

effective-treatment for certain foot pathologies. It is up to the podiatrist to be able to provide patients with the information they need to make an informed healthcare decision. If it is determined by patients that they should utilize a prefabricated or custom foot or-

thosis, the podiatrist must be able to help them make the best decision for their particular problem. This requires up-to-date knowledge of orthotic therapy, an understanding of other devices on the market and an ability to effectively communicate to the patient the benefits and drawbacks of each device. In doing so, you will build a more clinically effective and profitable orthotic practice.

Evidence-Based Orthotic Therapy

To build a successful orthotic practice, rule number one is to keep your skills up to date—in order to provide expert information to your patients, you must first be the expert. Orthotic therapy has changed dra-

The recession

has impacted

all elements of

the economy,

including

healthcare.

ically in the last 20 years. A tremendous amount of literature is now available that provides information on how orthoses should be prescribed to ensure best clinical outcomes for specific pathologies. Your focus should be

on applying this

mat-

evidence-based medicine to your orthotic therapy practice. It is the responsibility of every orthotic therapy practitioner to be familiar

OPTONETRIS

CUSTOM FIT
FOOT ORTHOTICS
ORTHOTIC

expert. Orthotic thera- A typical "custom-fit" orthotics display at a warehouse py has changed dra- store.

with this literature in order to provide the most effective foot orthoses, and to be able to communicate the value of your orthoses to your patients. Many educational opportunities are available. Every autumn the Prescription Foot Orthotic Lab Association sponsors the International Conference on Foot Orthotic Therapy. The 11th annual meeting will be in Atlanta in October. One orthotic lab offers bimonthly online reviews of journal articles pertaining to orthotic therapy, and a comprehensive list of journal articles is available on their website. In addition, good orthotic labs will have clinical consultants

Continued on page 104

Orthotic Therapy...

available to offer input on specific prescriptions.

Presenting Orthotic Therapy to Your Patients

Orthoses are everywhere. Shoe stores, warehouse stores, arch support stores, physical therapists, state fairs and chiropractors all offer prefabricated or custom orthoses of one sort or another. Podiatrists, if they follow modern concepts of orthotic therapy, have the best back-

Having an effective

presentation to

educate patients to the

benefits of orthotic

therapy will provide

your patients with the

information they need

to make an educated

healthcare decision

and increase the

likelihood that they

will follow your

recommendations.

ground to provide the most effective foot orthoses—but this is not necessarily obvious to the patient. It is critical that you know what information your patients are exposed to, and you can effectively explain how your orthotic devices will help their specific problem and how they differ from the alternatives on the market.

Having an effective presentation to educate patients about the benefits of orthotic therapy

will provide your patients with the information they need to make an educated healthcare decision and increase the likelihood that they will follow your recommendations. Patients don't know where to turn. Radio and television commercials air daily touting the benefits of "custom fit" orthoses at arch support stores. Warehouse stores have foot scanners and sell orthotics for less than \$90.00. Shoe stores have patients stand on "foot pressure scanners" and recommend prefabricated orthoses. It is no wonder that patients are confused. It is the job of podiatrists to provide the education patients need to make informed decisions.

Following are effective methods of explaining orthotic therapy to

patients. When explaining orthotic therapy it is helpful to use the patient's specific pathology to explain how orthoses will function to relieve pain.

Let's use metatarsalgia as an example. A number of recent studies have demonstrated that very specific orthotic modifications reduce pressure under the metatarsal heads.¹⁻⁷ These include total contact orthoses (orthoses that conform very close to the arch of the foot), metatarsal pads, and cushioning under the met heads. A very effec-

tive method to explain the benefits of orthotic therapy, and how your orthotics work better, is to explain the effects of pressure on their feet. An explanation on orthotic choices for a patient with metatarsalgia might go like this:

"In order to relieve your pain, a number of studies have shown that we have to reduce the pressure under the ball of your foot. We do this by putting something inside your shoe that will transfer the pressure off of

the ball of your foot and onto the arch. These studies show that the tighter an orthotic hugs your arch, the more pressure it takes off the ball of your foot. You have two choices to accomplish this—prefabricated arch supports or custom orthotics. There are advantages and disadvantages to both.

The advantage of prefabricated orthotics is that you can be in them right away and they are relatively inexpensive. Good ones cost anywhere from \$30—\$50, and you can purchase them from us or from local shoe stores. What we mean by "good ones" is that they are rigid enough to transfer the force off of the ball of your foot. If they are too soft, they will just flatten and will not transfer pressure. The disadvantage is that they don't match your foot as closely as a custom orthotic

and thus do not do as good of a job of transferring force off of the ball of your foot. They will, however, transfer force much better than the insole of your shoe. [It is helpful at this point to hold a prefabricated orthosis next to their arch to show the gapping that often occurs].

The advantage of custom orthotics is that we can prescribe them to conform very close to the arch of your foot. [Keep some sample custom orthoses with relatively high arches in each treatment room and at this point in the explanation hold these up to their foot noting how much better they conform to the arch.] By doing so, they will do a much better job of transferring force off of the ball and onto the arch of your foot—this makes them much more effective at reducing pain under the ball of your feet. In addition, we can modify them with pads and cushions to further reduce the pressure under the ball of your foot. And that's the name of the game—if we can reduce enough pressure, we can usually eliminate your pain. The other advantages of custom orthotics are that we can guarantee comfort, they last for many years, they simply work better, and sometimes they are covered by insurance. The disadvantage is that sometimes they are not covered by insurance and they cost more than the prefabricated arch supports."

The advantage of this type of presentation is that you are not "selling" orthoses—you are simply providing the patient with the information that s/he requires to make an informed treatment choice. Most patients will ultimately choose the better treatment. It is critical to note that this presentation is only effective if you are truly providing total contact orthoses. This requires excellent negative casting technique, a minimum cast fill and a high quality orthotic lab that does not overfill the medial arch of the positive cast.

The presentation should be modified for each patient's specific pathology. For plantar fasciitis, explain how the orthosis must decrease tension on the plantar fascia and incorporate valgus forefoot support, 8-11 and for hallux limitus, explain how the orthosis must help the first ray plantarflex. 12-15

Continued on page 106

Orthotic Therapy...

Addressing Confusing Advertising

It is common for patients to have questions regarding how the custom functional orthoses that you make compare to other orthotics they have seen advertised. Two of the most common that they are exposed to are the ubiquitous arch support stores that advertise heavily on radio and television; and warehouse stores such as Costco that are now selling orthotics in some regions of the country. This author is convinced that the advertising that these stores do serves to make patients more aware of orthoses, and in the long run benefits podiatrists. Regardless of whether or not you agree with this assessment, you must know how to explain the benefits of the orthoses you make and legitimately contrast those with devices they can get elsewhere.

"I already got custom orthotics at the Good Feet store."

There are four national arch support franchise chains (Good Feet, Neovita, Foot EFX, Ideal Feet) that follow the same sales plan. They advertise very heavily on radio and television that their "custom-fit orthotics" will cure foot pain. Customers are given a very slick sales pitch in the store and, if they bite, are sold prefabricated orthotics for severely inflated prices. The term "custom fit" is confusing to patients, as it is likely meant to be. Custom fit essentially means that the arch support was taken out of the box and sized to the customer's foot-but to their customers, "custom-fit" is often confused with "custom-made".

It is relatively easy to help patients understand the difference. In fact, once patients understand what they purchased, they are often embarrassed that they were essentially conned. In order to not sound defensive, it is important not to disparage the devices, but to simply explain what they are. Before giving this presentation, be sure to first give them the presentation above explaining the difference between custom and prefabricated orthoses. Again, we will tailor this presentation to patients suffering metatarsalgia:

"The arch supports that they sell are relatively good prefabricated arch supports, but they are not custom orthotics, and unfortunately, they are extremely overpriced. Like all prefabricated arch supports, they do not conform very close to the arch of your foot. You can get the same arch supports online for less than \$30.00 and I can give you a list of better OTC arch supports that you can purchase locally for \$40 or \$50. Since you are still having pain under the ball of your foot, we can also use a custom orthosis to conform closer to the arch of your foot in order to better transfer pressure off of the ball of your foot and relieve your pain."

If the patient already purchased arch supports from the arch support store, and they do not want custom

orthoses at this time, inform them that it is okay to wearing them, but to tell their friends to avoid the arch support store as the same devices are available elsewhere at a tenth of the cost.

"I saw orthotics at Costco for \$89. Will those work for me?"

Costco has started offering non-prescription

arch supports at many of their warehouse stores. They are using an imaging device where the patient stands on a type of flatbed scanner and an enhanced black and white photo is taken of the plantar surface of the foot. Several days later, the customer picks up the arch supports at the same Costco store. A letter from Costco to the Washington State Podiatric Medical Association confirmed that these are not custom devices but are simply prefabricated arch supports. The scanning unit is used for sizing purposes only.

Costco markets their foot scanner as OrthotixRx®. The name is confusing to patients as it gives the impression that these are prescription orthoses. Again, it is relatively simple to help patients understand exactly what they are getting for their \$90. The following presentation has been successful:

"The orthotics at the warehouse store are not custom orthotics. What they do is use a type of scanning device that works like a copy machine and takes a two-dimensional black and white image of your foot. From this information, they are able to determine your foot size. Then, based on this size, an arch support that matches the size of your foot is pulled from a shelf and shipped to your Costco store where you can pick it up.

They are actually pretty good prefabricated arch supports, but you are not getting a custom orthotic. Given that, I feel that they are overpriced. I can provide you with a list of very good OTC arch supports that you can

> get for less than \$50 at local shoe stores or from our office. Keep in mind that when comparing prices for orthotics, the Costco orthotics have to be compared to other prefabricated arch supports—not to a custom orthotic."

The downturn in the economy and patients' reluctance spend on elective healthcare offers

an incentive to evaluate whether your communication regarding the benefits of custom foot orthoses is providing your patients with the information they need to make an appropriate treatment decision. If custom orthoses are the best treatment option, when given appropriate information, most patients will choose the best option to treat their pain—whether or not that option is covered by their insurance. It is to the benefit of your patients and your practice to develop and rehearse presentations that clearly explain the benefits of foot orthotic therapy for the primary conditions treated with foot orthoses and to

Continued on page 108

Orthotic Therapy...

also develop presentations that address patients' most common concerns regarding foot orthoses. n

References

- ¹ Chalmers AC, Busby C, Goyert J, et al. Metatarsalgia and rheumatoid arthritis-a randomized, single blind, sequential trial comparing two types of foot orthoses and supportive shoes. J Rheumat 27(7):1643-7, 2000.
- ² Hodge MC, Bach TM, Carter GM: Orthotic management of plantar pressure and pain in rheumatoid arthritis. Clin Biomech 14(8):567-575, 1999.
- ³ Li CY, Imaishi K, Shiba N, et al: Biomechanical evaluation of foot pressure and loading force during gait in rheumatoid arthritic patients with and without foot orthosis: Kurume Med J, 47:211-217, 2000.
- Hastings MK, Commean PK, Smith KE, Pilgram TK, Mueller MJ. Aligning anatomical structure from spiral X-ray computed tomography with plantar pressure data. Clin Biomech (Bristol, Avon). 2003 Nov;18(9):877-82.
- ⁵ Hsi WL, Kang JH, Lee XX. Optimum position of metatarsal pad in metatarsalgia for pressure relief.. Department of Rehabilitation, National Taiwan University Hospital, Taipei, Republic of China. Am J Phys Med Rehabil. 2005 Jul;84(7):514-20.
- ⁶ Holmes GB Jr, Timmerman L. A quantitative assessment of the effect of metatarsal pads on plantar pressures. Foot Ankle. 1990 Dec;11(3):141-5. Related Articles, Links
- Chang AH, Abu-Faraj ZU, Harris GF, Nery J, Shereff MJ. Multistep measurement of plantar pressure alterations using metatarsal pads. Department of Orthopaedic Surgery, Medical College of Wisconsin, Foot Ankle Int. 1994 Dec;15(12):654-60.
- Gross MT, Byers JM, Krafft JL, Lackey EJ, Melton KM: The impact of custom semirigid foot orthotics on pain and disability for individuals with plantar fasciitis. J Ortho Sp Phys Ther, 32:149-157, 2002.
- ⁹ Scherer, PR, et al. Heel spur syndrome, pathomechanics and non-surgical treatment. Journal of the American Podiatric Medical Association 1991; 81:68-72.
- ¹⁰ Kogler G, Veer FB, Solomonidis, SE. The influence of medial and lateral placement of orthotic wedges on loading of the plantar aponeurosis. Journal of Bone and Joint Surgery; 1999:81A:1403-1413.
- 11 Gross, MT, Byers, JM, Krafft, JL, Lackey, EJ, Melton, KM. The impact of custom semi rigid orthoses on pain and disability for individuals with plantar fasciitis. Journal of Orthopaedic and Sports Physical Therapy 2002;32:149-157.
- ¹² Boffeli TJ, Bean JK, Natwick JR. Biomechanical abnormalities and ulcers of the great toe in patients with diabetes. Foot Ankle Surg, 41(6):359-64, 2002.
- ¹³ Drago JJ, Oloff L, Jacobs AM. A comprehensive review of hallux limitus. J Foot Surg 23: 213, 1984.
- ¹⁴ Ebisui JM. The first ray axis and the first metatarsopha-

langeal joint; an anatomical and pathomechanical study. J Am Pod Med Assoc, 58:160-168, 1968.

15 Grady JF, Axe TM, Zager EJ, et al. A retrospective analysis of 772 patients with hallux limitus. J Am Podiatr Med 92:102. Assoc 2002.

Dr. Huppin is an adjunct associate professor in the Department of Applied Biomechanics at the California School of Podiatric Medicine at Samuel Merritt College. He is



also the medical director for ProLab Orthotics and SHOES-n-FEET shoe stores. He has a private practice in Seattle, WA.