

Guidelines for Choosing Orthotics

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"Should this patient be wearing orthotics?" If you're unsure of the answer, consider the following observations:

- By age 20, an estimated 80 percent of people have some type of foot problem.¹
- Foot conditions can be asymptomatic, yet be the source of stress or pain in other parts of the body.¹⁻²
- A simple postural evaluation usually can determine whether orthotics are or are not indicated.

Whenever a patient shows a need for flexible, custom-made foot orthotics, you must decide which style of orthotics to order. This is not a decision to be taken lightly; only by selecting the appropriate type(s) of orthotics can you ensure a good response and outcome. Which orthotics you select must reflect the patient's health needs and lifestyle.

Fit for Function

It's extremely easy to supply a well-designed, well-made pair of custom orthotics; but if they don't fit the patient's shoes properly or if they're not designed to hold up to the types of activities in which the patient participates, they won't function as needed. If the patient can only wear the orthotics occasionally in certain shoes, the feet, spine, and pelvis will be exposed to the additional stress of varying amounts of support.

In order to do the job right, you will want to make sure the orthotics have been designed for your patient's shoes, activities and physical condition. Let's review some of these variables.

Orthotics and Footwear

Contemporary dress shoes usually are slim, fashionable slip-ons, and standard orthotics just won't fit. For both men and women, non-lacing dress shoes usually require orthotics with dot fasteners, which anchor the orthotics into the shoes' lower heel counters and slimmer lines. Thankfully, many women currently are avoiding high heels, but those who do wear heels greater than 1 inch must be supplied with an orthotic specifically designed to take the plantar-flexed position of the foot into account.

Lace shoes (such as oxfords, work boots and sports shoes) can handle traditional orthotics, although full-length coverage might be desired in athletic shoes if the generic insert is removed. Western boots remain popular in several parts of the country and require yet another specialty orthotic due to their unique methods of construction and fit.

Orthotics for Special Needs

An orthotic's worst enemy probably is moisture, especially perspiration from the feet. If a patient works in a high-humidity environment or perspires excessively, the average leather orthotic can be warped or corroded by constant contact with moisture and foot sweat. In such cases, a specialty

orthotic is recommended. There are several styles available with upper-layer materials that can help repel wetness and regulate temperature.

Other variables that can affect orthotic choice include physical conditions such as diabetes (the skin will not withstand the pressure of most standard orthotics) and arthritis. A softer, more flexible orthotic will work much better for these patients.

Many patients are helped by orthotics that decrease the intensity of the shock waves which travel through the body with each heel strike. Geriatric conditions such as heel-pad thinning, joint arthritis (especially knee and hip) and spinal disc degeneration are helped immensely by improving shock absorption. Heel spurs need shock reduction and occasional specially-shaped padding to relieve pressure on sensitive areas.

If your patient is overweight, a firmer orthotic, designed to withstand the increased biomechanical forces, is important in order to maintain sufficient support. The combination of firmness and flexibility required of such an orthotic makes orthotic style selection especially critical for larger patients.

Orthotics and Activity Levels

The recreational and occupational stresses to which a patient's feet are exposed vary tremendously. Your sedentary patient will appreciate soft, very flexible orthotics, while more active patients and those who are on their feet at work need orthotics that provide more support along with good shock absorption.

Your success rate will depend on how specific you can be when selecting a corrective orthotic for your patient. Additionally, you will want to be sure the spinal foundation is corrected at least 80 percent of the time your patient is standing, walking or running. In most cases, therefore, your patients will need more than one pair of orthotics to provide the necessary level of support throughout the day, during all their various activities.

In many cases, it's advisable to prescribe what is known as an orthotics "combo," which is two pairs of flexible, custom-made orthotics - one set for dress shoes and one set for recreational lace shoes. When a patient receives a "combo," he or she will be supported during both dress and sport activities.

When a doctor orders orthotics designed to fit the patient's lifestyle, the biomechanical support is more comprehensive and the results are more gratifying. Everyone involved appreciates a job that's done right, not halfway.

References

1. Schafer RC. *Chiropractic Management of Sports and Recreational Injuries*. Baltimore: Williams & Wilkins, 1982:517.
2. Hyland JK. *Spinal Pelvic Stabilization: A Practical Approach to Orthotic Application*. Roanoke, VA: Foot Levelers Educational Division, 2002:15.

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