

How to Help Your Female Patients Understand the Need for Orthotics by Dr. Mark Charrette

Women are different from men not only in structure and biomechanics, but also in the way they make purchasing decisions. Therefore, when you recommend flexible, custom-made stabilizing orthotics to your female patients, it's important to follow these three guidelines: address women's special needs, target your message to women, and provide valuable, detailed information.

Address Women's Special Needs

We often tend to treat female patients who have foot imbalance and lower extremity dysfunction the same way we treat male patients. It's important to recognize the areas of difference so you can address them when recommending custom-made orthotics to female patients. Compared to men, women's feet are different in shape and size; they wear different shoes; and their gait styles are dissimilar. Thus, orthotic solutions need to be specific to women.

The shape of a woman's foot varies in several ways from a man's. The female foot tends to have a narrower heel (in relation to the forefoot), and is narrower overall than a man's foot relative to its length.¹ Because of the narrow heel and foot, the forefoot is relatively quite wide. This causes the biomechanical forces on the foot to be distributed in a different manner.

Women tend to develop biomechanical problems and symptomatic forefoot conditions more frequently than men. Bunions (hallux valgus), hammer toes, callus formation, interdigital neuromas, and metatarsalgia are all more common in women.² Many of these conditions have been linked to abnormal biomechanical forces in the feet.

Investigators compared weight-bearing X-rays of the hindfeet in normal female subjects to those with hallux valgus. They found that the calcaneus and talus in feet with hallux valgus had excessive pronation.³ Another study confirmed that callus formation is closely associated with several specific "abnormal foot weight-bearing patterns," including a lower medial arch with greater pronation, reduced dorsiflexion of the first metatarsal joint, and limited ankle dorsiflexion (due to calf muscle tightness).⁴

Orthotics for women should be designed to support the longitudinal and anterior transverse arches,⁵ to provide metatarsal padding, and to limit excessive heel motion. Researchers have found that small, dense metatarsal arch pads positioned more distally are most effective in reducing the pressures on the metatarsal heads.⁶ One study of patients with metatarsalgia found that custom-made orthotics with a "metatarsal dome" decreased the plantar pressures by an average of 17 percent and reduced the reported pain by 71 percent.⁷

All female patients should have their footwear checked for fit, since many are wearing shoes that don't fit their feet, with heel heights that increase the pressures on the fronts of their feet. Even a heel as low as $\frac{3}{4}$ inch may increase the pressure on the forefoot by as much as 22 percent.⁸ One easy method to check the shoe fit is to trace each foot during standing and then trace the shoe. Any significant discrepancy means that the foot is cramped when standing and restricted during gait. When a higher heel is worn, more pressure is exerted on the forefoot, making proper fit more critical.

A properly-designed orthotic should maintain all of the arches, and padding and support for the anterior transverse (metatarsal) arch is especially important for women. However, no orthotic can support the foot correctly if it is placed in an improperly fitted shoe. Shoe size, both length

and width, must allow for correct biomechanics during gait. Custom-made stabilizing orthotics designed specifically for women's special needs are available in various lengths to fit many different shoe styles.

Target Your Message to Women

Many female patients may not present with foot pain or symptoms of common foot disorders, but ask them how they feel at the end of the day and almost every woman will have the same general answer: "fatigued." Flexible, custom-made stabilizing orthotics can help reduce fatigue, just like they can help reduce symptoms caused by common foot problems. Special materials built in to the forefoot of the orthotic can help give your female patients an extra boost of energy with every step they take. Whether they are executives, waitresses, stay-at-home moms, or somewhere in between, all women could use more energy to help with their activities of daily living.

Talk to your female patients. Listen to the issues and concerns that are important to them. Their lives are always changing, and they have to adapt quickly to take on new roles and responsibilities.⁹ Open communication with your female patients will help you learn what's important to them, which will help you target your message more effectively. Women respond better to messages specifically created for them.⁹

Provide Valuable, Detailed Information

Women often require more information about a product than men do before they buy.⁹ If you want female patients to follow your orthotics recommendations, you'll need to give them all the details on how orthotics can help them. Make sure the information is clearly presented to avoid confusion. Don't oversimplify the information, or your female patients will feel like you are talking down to them. Instead, explain the information and give them an opportunity to ask questions for more clarification.

Flexible, custom-made stabilizing orthotics designed specifically for women have a thin and narrow design to better support the shape of a woman's foot and easily fit into her shoes. Focus on how they can wear the orthotics in shoes they already own, from athletic shoes to pumps. Custom-made orthotics support all three arches of the foot to help improve your female patients' structural alignment, hold their adjustments longer, and reduce their risk for developing common foot disorders. Be sure to explain all the benefits of custom-made orthotics so female patients can make a well-informed decision that will likely follow your recommendations.

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