

Orthotics

by: Dr. David Lee, Chiropractor, Masters ART provider

HISTORY

Mike is a 36 year old male patient that I've seen on and off for the past few years. Every once in a while Mike aggravates his lower and upper back for non-specified reasons. Originally I suspected repetitive strain injury due to poor posture or a weakness in his core strength. However, Mike didn't respond to my treatments as well as my other patients with similar injuries.

The majority of cases that I see are commonly due to a result of muscular imbalances where some muscles are tight, and others are weak. This naturally creates a tug of war in the body where the tight muscles overpower the weak muscles resulting in a muscular imbalance, leading to pain. Once identified, the tight restricted muscles are treated with Active Release Technique (ART), a specialized soft tissue release technique designed to break up scar tissue in restricted muscles. The weak muscles are then strengthened largely through core exercises. Using this technique, I have been able to resolve the pain in the majority of all the patients that I treat.

Mike's response was different. Although he responded well to treatment, his pain would reoccur after a few days. This led me to believe one of two things. Either we didn't correctly identify and treat his problematic muscles, or there were other biomechanical factors involved. Since I had seen Mike several times over the years, I was confident that we had addressed all possible muscle groups. After further consultation, we concluded that proper orthotics may also play a significant role in relieving his back pain.

Once I fitted him with a new pair of custom orthotics, his pain subsided immediately. Upon follow-up, it was clearly evident that Mike would remain pain free as long as he used his orthotics.

Although Mike's case is a bit extreme, this is something I have been observing more often in my clinical practice. For some patients, conventional muscular treatments serve only as a band-aid solution in addressing their pain, and only until their biomechanical deficiencies are addressed, largely through custom orthotics, have their problems been corrected.

THE PRIMARY PROBLEM:

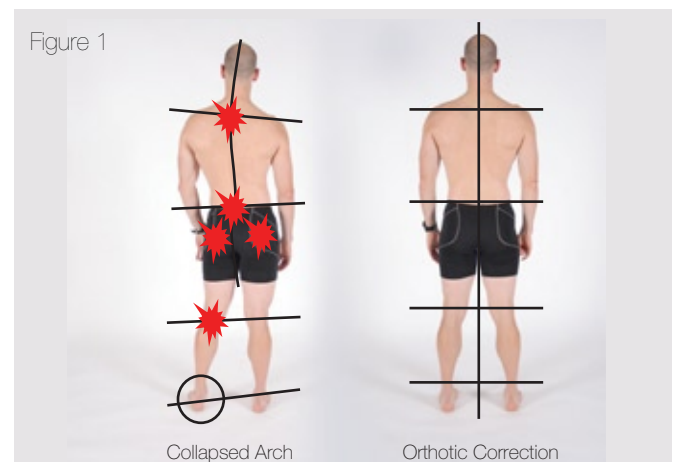
Over Pronation (flat feet)

Like Mike, approximately 90 percent of individuals pronate (have flat feet). This can result in several mechanical problems such as:

- Plantar fasciitis (pain in arch)
- Shin splints
- Patello-femoral syndrome (knee tracking problem)
- Low back pain
- Hip pain
- Knee pain
- Bunions
- Metatarsalgia (nerve inflammation between toes)
- Ankle pain

And many more...

When the foundation of a house is compromised and begins to sink, it affects the entire structure of the house and must be dealt with quickly in order to prevent further damage. In the same way, when we stand, walk, or run, our feet serve as the foundation of our bodies. If compromised, this weak foundation can create problems not only in the foot itself, but also throughout the entire body. When the natural arch in your foot drops, thereby resulting in flat feet, it can cause or contribute to all or some of the problems mentioned above. (see fig. 1)

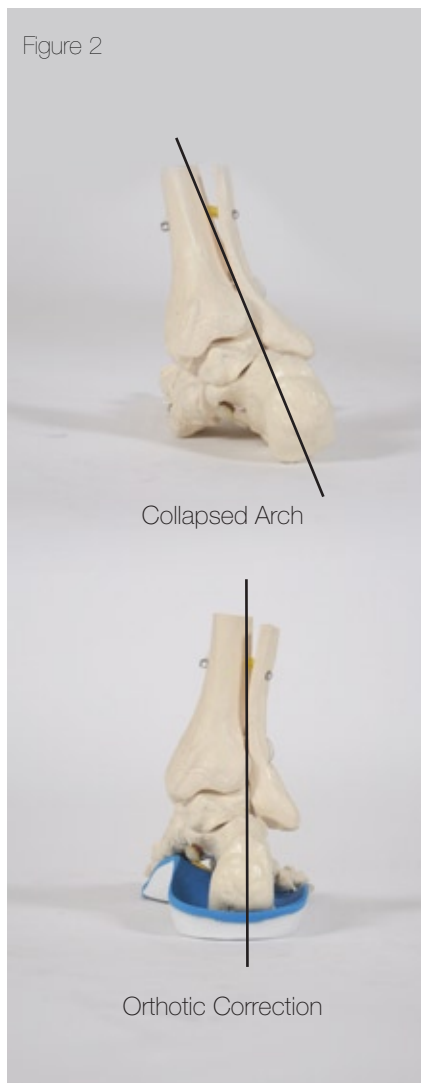


THE SOLUTION:

The goal is to restore optimal arch height and function. High quality orthotics that are custom-fit to an individual's arch are supposed to provide stable alignment of the foot. This in turn can improve the posture of the body, resulting in pain relief and correction of the conditions listed above.

(see fig. 2)

Figure 2



ONE NOTE OF CAUTION:

Most custom orthotic companies use wedges to control foot function and keep the arches to a minimum to reduce discomfort. However, the optimal effectiveness of the orthotic to prevent arch collapse is severely compromised due to the lack of a full and dynamic arch support. Having personally dealt with many orthotic companies in the past, I began to realize that as much as all of these companies state their orthotics are custom made, they are more generic than you think. Unfortunately, these types of orthotics end up being just a very expensive shoe insert. Be sure that when you are shopping around for orthotics that you choose a company and practitioner that creates a full arch contact orthotic. (see fig. 3)

FINAL NOTE:

Many practitioners may scare patients into thinking that everyone needs orthotics. This is simply not true. Whether or not you are one of the 90% of the population that pronates, if you are not showing any mechanical wear and tear, or symptoms from a biomechanical imbalance, then you will likely be OK without them. However if you do suffer from some of the symptoms indicated, or feel you may be at risk for these injuries due to wear and tear over time, orthotics may be an effective and simple solution for you. If you have any questions regarding orthotics feel free to book a free consultation to see if you may be a candidate for them.

Figure 3



Mike's Testimony

I recently was fitted for a new pair of orthotics - they literally changed my daily life, AGAIN. I have been wearing orthotics for 21 years and have had several pairs.

One limiting aspect of orthotics is they don't come with an expiry date, and its hard to know when its time to get re-fitted for a new pair. A few weeks ago I started to get some lower back pain that reflected up into my shoulders. After a few trips to Dr. Lee for some relief I realized that perhaps it was time to get a new pair. Despite lots of stretching and several ART sessions the pain and general stiffness across my body persisted. I hadn't been able to run and working out was even difficult.

Unfortunately, it takes a few days to construct a pair of orthotics. During that week, the joint pain I experienced got worse. In fact, the day prior to picking up my orthotics I even had to walk with a cane due to cramping in my left foot. Within my first hour of wearing my new orthotics I started to feel some relief. It took a few weeks for the muscle stiffness and joint pain to subside. I have already put a note on my calendar to get a new pair of orthotics to preempt any issues like I just experienced.



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