

## Plantar Fasciitis: A Unique Approach

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Ah, the ever-frustrating condition of plantar fasciitis. Why do so many people suffer from it and so few actually get better with traditional therapy? Sadly, it is not well-understood, scientifically or biomechanically. Most health care professionals do not know the latest research and are not even aware of the basic program for plantar fasciitis treatment, much less advanced care options for severe and/or atypical cases. If you want results, you must offer patients more than basic treatment. What follows is a unique treatment approach.

What is plantar fasciitis and why does it develop? Plantar fasciitis is a very common kind of tendinitis, but instead of a tendon, it's the plantar fascia of the foot that's inflamed. The plantar fascia (aka the plantar aponeurosis) is a sheet of connective tissue that stretches from the heel to toes, spanning the arch of the foot. It is basically an inflammation and thickening of the plantar fascia caused by chronic irritation of the arch of the foot due to excessive strain.

Muscle knots, technically known as myofascial trigger points (MTPs), are a factor in almost all cases. A trigger point is a section of super-contracted and irritated muscle tissue, and it can cause symptoms ranging from mild stiffness to extreme pain. They not only cause pain and problems directly, but also develop in response to other biomechanical problems, particularly with lower crossed syndrome (LCS). LCS is a consequence of poor postural alignment and dynamic postural equilibrium dysfunction of the kinetic chain.<sup>1</sup> Though the existence and importance of trigger points is well-known to medical specialists and researchers, most doctors and therapists know almost nothing about them, so misdiagnosis and ineffective treatment are common. The 12-visit program below is based on removing MTPs and reversing the lower crossed syndrome.

### Laser Therapy

Lasers significantly reduce pain and inflammation, but also stimulate the formation of new collagen matrix in damaged tissues.<sup>2</sup> Properly applied laser therapy with optimal dosage is one of the best modalities available for effective treatment. Here are my recommendations, based on successful clinical outcomes in my practice using 4-10 joules (J) per cm<sup>2</sup> for deep tissue therapy. Always treat proximal to distal for proper neurolymphatic drainage: 750 J lumbosacral spinal-nerve roots to reduce neuropathic and denervation components affecting the quality of collagen in soft tissue;<sup>3</sup> 250 J plantar surface of the foot; 500 J (soleus, posterior tibialis, flexor digitorum longus); and 500 J gluteus medius/minimus. Ideally, all areas should be treated during the same session. The protocol is two visits per week for a total of 10 laser sessions.

### Manual Therapy

Trigger points and myofascial adhesions are primary culprits in unresolved plantar fasciitis. You will notice most of these muscles are far-removed from the symptomatic area. So why work them? To remove kinetic chain biomechanical compensation patterns of the LCS, perform hands-on muscle therapy to the following areas with whatever soft technique you prefer (ART, MFR, TPT, PNF, etc.). If affected, these areas will be tender and painful. It takes at least six to 10 sessions for

most MTPs to resolve. Primary muscles include: iliopsoas, quadratus lumborum, gluteus medius/minimus, tensor fascia latae, iliotibial band, adductor longus/magnus, vastus medialis obliquus, tibialis anterior, posterior tibialis, flexor digitorum longus, soleus and intrinsic foot muscles.

### Night Splints

Night splints may be extremely effective in treating plantar fasciitis, including stubborn cases. They are evidence-based, cheap, easy and effective for the great majority of patients. They are so good that for many people, it can be the secret component to lasting relief. Have the patient purchase one; they are usually available at most medical supply stores. (Better yet, sell them in your office.) Several nights of usage may be required before a difference is noticed. Don't forget to bill for the medical equipment and instructional usage with Self Care/Home Management Training 97535.

### Home Care

Teach the patient how to apply trigger-point therapy and myofascial release at home by using tennis balls, baseballs, golf balls and biofoam rollers.

Primary areas include the plantar surface of the foot, calf and buttock regions.

Again, you may use code 97535 to bill for your instructional time. The key is to have your patients do the therapy three to five times per day for 60 seconds on each area of the foot. Remember, it's about frequency, not duration. People who have suffered for years without relief from traditional therapy will usually be compliant with this home-care program.

### Neuromuscular Re-Education

BAPS boards and wobble boards are perfect for rebuilding the intrinsic stabilizer muscles of the spine and foot. These are key factors in taking stress off of the primary movers of the body and reducing the effects of a lower crossed syndrome. It is a fun and interactive therapy that only takes several minutes to complete. Plus, you can bill for the therapy using Neuromuscular Re-education (NMR) 97112. Do not begin the NMR program until you have removed active/latent trigger points, typically between visits three and six. Carry a supply of boards in your office and ensure each patient gets one for home use.

### Joint Fixation

Examine the following areas for possible subluxation/fixation (any and all areas may be involved): L1 and L2, L5 and S1, sacrum torque, rotated ilium, anterior femur head, tibiofemoral complex, fibular head, calcaneous, talus, navicular, cuboid and cuneiforms. Most physicians have never evaluated the kinetic-chain biomechanical factors contributing to plantar fasciitis, so you will usually find multiple fixations.

### Lifestyle

Activities of daily living (ADL) must be mentioned here, including proper shoes, exercise, work habits, ergonomics, etc. Despite the best care program, maximum results will not occur if patients continue to irritate the condition. They will need to make genuine effort and certain sacrifices to recover. Review their daily habits to ensure compliance, and don't assume that other providers have evaluated these contributing factors. Most physicians won't, and if they did, the patient probably forgot. Examine everything; even the most trivial activity can have an effect on long-term

results.

This therapy program is outside the norm of basic treatment for plantar fasciitis, and that is why it works so well. The definition of insanity is doing the same thing over and over, expecting a different result. So my question to you is: "If traditional therapy is so ineffective, why continue doing it?" Implement this program and see the results for yourself. More importantly, let your patients live the results. After all, they are the ones who matter most.

### *References*

1. Clark MA. *Integrated Core Stabilization Training*. NASM, Thousand Oaks, Calif., 2001.
2. Blahnick JA, Rindge DW. *Laser Therapy*. Healing Light Seminars, Melbourne, Fla., 2003.
3. Gunn CC. *The Gunn Approach to the Treatment of Chronic Pain*. Churchill Livingstone, 1996.

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