

# How to Heal Plantar Fasciitis

## Part II



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This article is the second part of a series that explains how to heal plantar fasciitis. (PLAN-tur fas-e-l-tis). This condition is one of the most common forms of heel pain that we see in our clinics. Most people (90 percent) who have plantar fasciitis can completely recover within a year if they follow conservative treatment measures. When patients do not get relief from conservative treatments, alternative treatment measures, or a combination of them, is used to kick start the healing process and to relieve symptoms. They are the second line of defense to avoid surgery.

### Alternate treatment measures

When conservative measures are not successful at eliminating symptoms, alternate treatment measures may be considered. These include the following:

- **Plantar fascia injection** of a corticosteroid is injected directly into the damaged portion of the ligament for temporary relief. Cortisone injections are usually administered into the heel or the arch of the foot. Usually, the number of injections is kept to a minimum to avoid further damage to the fat pad covering the heel bone, and to keep the plantar fascia from rupturing or weakening. Cortisone is considered to be degenerative and provides temporary relief.
- **Ultrasound physical therapy** is an alternate therapy to help reduce pain. Ultrasound uses sound waves to generate heat in the heel to enhance blood flow circulation and to loosen tissue. Deep heating tendons, muscle, or ligaments increases circulation to promote healing and to decrease pain. This helps tissue respond better during stretching and physical therapy. This therapy can be used for non-thermal effects to reduce inflammation. There are many favorable and unfavorable studies on the medical value of this device.
- **MLS Laser therapy** is a new innovation that is used with much success in Europe and the U.S. to reduce inflammation and pain. The MLS Laser is a Class IV laser that is FDA cleared. This therapy eliminates the need for injections or medications. Treatments are done in 5 to 15 minutes. The number of treatments depends on the severity of the patient's condition. Typical protocol requires six to twelve treatments. The laser provides dual (equally penetrating 3 to 4 cm) infrared wavelengths that are synchronized to generate simultaneous anti-inflammatory and analgesic effects. The therapeutic wavelength (808 nm) provides a continuous emission that is absorbed at the cellular level in the mitochondria. It accelerates tissue repair and cell growth by increasing production of ATP (adenosine-triphosphate). The analgesic wavelength (905 nm) is a pulsed emission that has a strong effect on the nerve cells. It blocks pain transmitted by these cells to the brain and decreases nerve sensitivity. Most patients achieve a disappearance of symptoms and long-lasting results.
- **Extracorporeal Shock Wave (ESW) therapy** is sometimes used if conservative treatments have not been successful. This therapy can be performed prior to considering surgery if symptoms persist for more than four to six months. The ESW device applies high-



intensity shockwaves to stimulate healing of the plantar fascia. The procedure can be done without anesthesia in the physician's office in less than 10 minutes. Treatment may cause bruises, numbness, tingling, swelling, and pain. Consult with your physician about contraindications. There are many favorable and unfavorable studies on the medical value of this device; however, ESW is considered to be an effective treatment modality for plantar fasciitis pain for relief up to a year.

- **Platelet-Rich Plasma (PRP) therapy** is in the experimental stage but holds great promise. The medical community is gathering more evidence about its use. PRP appears to be effective in the treatment of chronic tendon injuries. Researchers are hopeful that it will offer a more effective way to treat plantar fasciitis and provide longer-lasting results. Plasma and platelet-enriched fluid is injected into the foot to help connect tissue growth and vascular healing, and to reduce inflammation. This treatment may be preferred over the use of cortisone shots because cortisone is considered to be degenerative and provides temporary relief. PRP may also be used to improve healing after surgery for some injuries, this is done by preparing the PRP in a special way that allows it to actually be stitched into torn tissues. The risks associated with PRP are minimal — PRP injections can be painful at the injection site. Pain may increase for the first week or two, and it lasts several weeks until the patient feels a beneficial effect.
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When conservative and alternate efforts fail, surgical management becomes the most viable option. Typically, surgical candidates have had symptoms for nine months and made a full-faith effort to do their exercises and stretches on a daily basis. Some methods are more invasive than others.

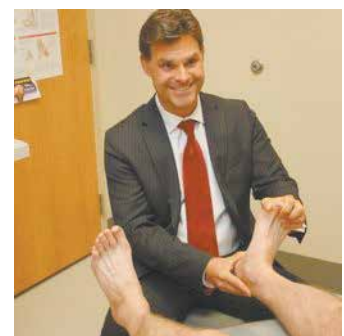
**Minimally invasive procedures**

Micro Radio Frequency Ablation (RFA) and Platelet Rich Plasma Injection can be utilized with immediate weight-bearing. Often, the addition of a gastrocnemius recession to lengthen the muscle is utilized with these modalities to try and address the deforming force causing the condition. These procedures do not violate the planter fascia at the insertion in the ligament, allowing it to remain strong afterwards. There are times however, where these modalities do not fully relieve the pain. In these cases, a Planter Fascia Release is necessary to relieve the symptoms.

**Plantar fasciitis surgery**

Plantar fascia release surgery is the gold-standard surgical procedure for treatment of plantar fasciitis; however, it does render the planter fascia weakened. This can lead to instability to the mid-arch which requires orthotic management to replace the strength of the planter fascia to prevent arch collapse. This release can be done open through a regular incision, or as endoscopic (minimally

invasive) surgery. This permits a tiny scope to be inserted while surgery is performed. In chronic cases, it is sometimes necessary to do other surgical procedures (such as a removal of a heel spur, or stretching or loosening specific foot nerves) in combination with a plantar release. The patient is partial-weight bearing after surgery for five to 10 days. Typical recovery time for a plantar fascia release procedure is generally three to four months, but maximal recovery can take up to a year. It is estimated that this procedure has a success rate around 85 percent.



*The vast majority of people can end their heel pain with simple management and early intervention. Unfortunately, most people wait eight months to a year before seeking medical assistance. There are numerous options to end heel pain. If you are seeking more information or would like to schedule a consultation to end your heel pain, call the Foot & Ankle Center of Illinois at 217-787-2700. We have clinics located in Springfield, Taylorville, Decatur, Carlinville, Shelbyville, Sullivan, and Monticello. Visit myfootandanklecenter.com to obtain information for stretching exercises you can do at home. You can also view a short video on MLS Laser Therapy and listen to physician and patient testimonials about this new technology.*



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