



**Plantar fasciitis:** Inflammation of the longest ligament in the body is generally caused by an overuse injury resulting from a combination of increased exercising (mileage, speed), biomechanical abnormality, tightness in your lower legs, improper shoes, weight gain, hard flooring, or wear & tear. Symptoms generally always worsen with walking, standing or running and improve with rest. It can be in any area on the bottom of the foot, but most commonly in the instep, center heel, front heel, and/or arch.

1. **CALE STRETCHING:** 10 reps for 10 seconds each 2-3 X daily esp. after walks or runs. Discontinue if moderately painful.
2. **ICING:** Freeze a plastic water bottle, place on carpet, and roll while standing under arch and heel. Rotate foot until it hurts in different places. This will massage, ice, and stretch the plantar fascia in one motion relieving pain and inflammation.
3. **NIGHT SPLINT:** Recommended if significantly tight calves. Use 30-60 min or more daily. Do not walk in it. It helps improve Range of Motion and morning pain in heels. There is a static night splint that keeps foot at 90deg thru night or an adjustable one.
4. **CORTISONE INJECTION:** It generally takes 24-72 hrs for pain to improve. If having moderate pain evening of and after shot, use lots of ice to reduce the inflammation. Do not exercise for 2 days after injection. It may cause some bruising that will improve. Sometimes a 2<sup>nd</sup> or rarely a 3<sup>rd</sup> shot is needed a couple of weeks apart. Dr. Bhakta does not recommend more the 3 injections in same area within a year.
5. **MEDICATIONS:** NSAID's may be given to reduce some swelling and pain. It usually does not work well for heel pain but may take the edge off. It works better for other types of feet problems. You may take 2 Aleve's 2 X daily with food or 3 Ibuprofens 3 X times daily with food if tolerable or causes no side effects with other meds. May or may not work.
6. **Plantar Fascia Strap:** Wear the removable pad (if made during the office visit) at all times except with inserts. It is better if you wear the pad while sleeping in order to keep the plantar fascia fully supported. This should help the heel pain in the morning.
7. **Shoes:** A stable shoe is the most underrated treatment for heel pain. For most people with heel pain, the problem is with the mechanics of the feet. Certain joints of the feet are over flexible and need to be supported better. Three criteria that a shoe must meet 1. Stable heel counter (back portion of shoe that supports the upper heel-should not be able to squeeze so it collapses) 2. Stable midsole- should not be able to twist or turn like a towel in the long axis of shoe 3. Shoe should flex upward only in the toe box.
8. **NO BAREFOOT.** CROC SANDALS OR CLOGS ARE AN ALTERNATIVE TO SIMPLE HOUSE SLIPPERS and can be worn in evenings or when at home. Many people cannot wear them all day but are beneficial for 4-6 hrs at a time.
9. **Foot orthotics:** Orthotics are biomechanical supports that provide proper support to the arch and heel of the feet. Once excess motion is decreased in the feet, symptoms of heel pain tend to dramatically decrease. Cortisone injections will reduce pain short term but orthotics can maintain and reduce the symptoms long term.
  - Good-** OTC orthotics - pre-made flexible arch supports with some padding. **Avg. lifespan about 6-12 months.**
  - Best-** Custom orthotics - A plaster molding is taken of the feet in the corrected position (similar to a crown) and the cast is sent to an orthotic laboratory. Devices are made according to your 3-D foot molds and doctor prescription. The width, length, depth (in heel) will be adjusted to match your feet. Varying top covers can be added for maximum shock absorption and comfort. Guaranteed against breakage (shell) for 2 years and **average lifespan about 3-7 years.**
10. **Exercising options:** I do not like to stop patients from reaching a goal that they have set. Exercise is good for the mind and body. Thus, you may continue to exercise in low impact activities such as water aerobics, bicycling, and elliptical gliders unless specifically told not to. They are more tolerable and generally do not aggravate the problem. As always, you can try the exercises to TOLERANCE. Running and walking will definitely aggravate it more. Incline treadmill, uphill running, running or walking at higher speeds will make the problem worse because it tightens your muscles and reduces flexibility. **It is important that after any type of exercising, you stretch the back of your legs/ankles and use ice to reduce the inflammation.**