

The Clinic

Plantar Fasciitis and Orthotics

I have been running for 15 years and average 40 miles a week. A few months ago, after a longer-than-usual run, I had sharp pain and cramping in my foot two to three hours after my run. I took some anti-inflammatories and elevated my foot, and by the next morning the pain was gone.

Since then, however, the same thing keeps happening—I can run without much pain, but then I really suffer afterward. My physician diagnosed plantar fasciitis and heel spurs and gave me orthotics. After almost two months with the orthotics, I still have the post-run pain. After a few steroid injections into the inflamed areas, things are a little better, but still not as they were before.

This all started a month or so after I switched shoes. My stride felt different in them, slightly better after I added inner soles. Now, though, the orthotics don't seem to work well with the inner soles.

What's the proper way to use hard plastic orthotics in running shoes? Should I wear the orthotics in regular running shoes or should I use them in the more stable shoes made for people who overpronate? What else can I do to eliminate my problem?

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To start, let me explain a little about plantar fasciitis and heel spurs, which often go hand in hand. Plantar fasciitis is one of the more common running injuries and often one of the more difficult to cure.

The plantar fascia is a very thick fibrous material that runs along the bottom of the foot. It begins at the heel bone and carries forward to the ball of the foot. Running causes repetitive trauma which may result in inflammation, stretching, or tearing of the plantar fascia. The repetitive increased pulling on the heel bone is often the cause of the heel spur.

In some people, plantar fasciitis responds quickly to treatment, while in others it can become a chronic problem. The fact that you have heel spurs means

that there has been excessive pulling on the heel bone for quite some time.

Once you have plantar fasciitis and heel spurs, it is best to try to figure out why you developed the problem. Some leading causes are a high-arched foot which pounds excessively, a flat foot and its resultant excessive pronation, a job which requires you to be on your feet most of the day, and a prior injury to the area.

The proper way to use a hard plastic orthotic device in running shoes is to remove the inner lining and put the orthotic at the base of the shoe in place of the lining. If the orthotic stops at the metatarsal head, you may want to place a flat liner underneath the orthotic, but it should not be the running shoe liner.

If your heel spur is from a high-arched foot that receives excessive pounding, the plastic orthotic may need a top cover of a softer material, or it may need to be of a different material entirely. If your problems stem from excessive pronation, the hard plastic orthotic by itself may be adequate.

As to whether to wear your orthotics in regular running shoes or in more stable ones, if you pronate excessively you should get a stable shoe and put the orthotic in it. If you wear a light-weight shoe or one that is built for shock absorption rather than motion control, you are defeating the purpose of the orthotic. Although you will get motion control from the orthotic, this must be combined with a good running shoe that also helps to eliminate pronation.

Also, be sure to replace your running shoes regularly (as soon as after 500 miles) and don't let the heel counters get worn down.

Orthotics can and should be corrected if after wearing them for about a month your problems haven't improved much. In general, orthotics work well for controlling pain from plantar fasciitis and heel spurs.

If fixing your orthotics doesn't work, additional steroid injections might help. This may reduce inflammation or chronic bursitis, if you have it. A physical therapy program consisting of ultrasound,

electrical stimulation, and whirlpools might also help you.

Surgery would probably fix your problem, but it should be a last resort, partially because more conservative treatment usually works and partially because surgery will keep you from running for at least two months.

Finally, I can't overemphasize the importance of stretching the Achilles tendons and the plantar muscles of the foot. To stretch the Achilles tendons, do wall push-ups by standing about three feet from a wall with your legs shoulder-width apart. Lean forward and place your palms against the wall. Bring one foot six to 12 inches behind the other while keeping your knee straight. Lean forward without bending your knee and hold this for a count of ten. Do this ten times for each leg. Get into the habit of doing this both before and after your runs. A device called the Pro-Stretch, often advertised in running magazines, is effective at isolating the plantar fascia and the Achilles tendon.

To stretch your plantar muscles, extend your leg while sitting. Place a towel over the end of your toes and pull toward you. The Pro-Stretch also does a good job on the plantar muscles, and deep cross friction massage also helps.

If you have time, soaking your feet in cool water immediately after running may reduce inflammation and alleviate cramping.

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