

Heel/Arch Pain

Heel and arch pain can be subdivided into 4 diagnosis based on the location of the pain.

- Arch pain: pain along the middle portion of the arch and is usually not very pinpoint.
- Plantar fasciitis: very pinpoint along the inside portion of your heel.
- Fat pad syndrome: dead center on your heel and is painful with direct pressure on the heel.
- Insertional Achilles Tendinopathy: Pain on the backside of your heel just before the achilles tendon

For the sake of this post, I am only going to talk about arch pain and plantar fasciitis. Fat pad syndrome occurs but is not that common and insertional achilles tendinopathy is a whole different animal and requires a more comprehensive approach to treatment.

The Diagnosis and Treatment:

Regardless of the location of your pain, there are a few simple tests that you can do that will help determine the type of exercise you need to perform to help your pain. During my evaluations in the office, I try to determine if the pain you are feeling is local pain (pain arising from the tissues near the site of pain) or spinal referred pain (pain arising from the spine that is referring to your site of pain). Just because you have pain in your heel or arch does not mean that the tissues in that area is primary pain generator.

Here is a simple process to figure this out. Before you do any testing or exercises, I want you to find a movement that is consistently painful. This can be just walking, walking on your toes, calf raises, or jumping. Make sure you know the exact reps or distance when pain your starts and rate your pain from a 1-10. Once you figure this out, you have established your baseline.

With the baseline established you are going to perform 2 simple exercises with your back. After each set of exercises, perform your baseline test again and see if any thing changed (more reps or distance to feel pain and/or less intense pain).

Extension in Lying (Pressups)

This exercise may look familiar for you but it is a very powerful exercise. Perform 2 sets of 10. At the top of each rep, relax your back, glutes and legs and take breath out. Retest your baseline movement and see if anything changed.



Side Glides

You will perform this exercise only in one direction. If you have pain in your right arch/heel perform it with your left forearm against the wall. If its your left arch/heel, perform it with right forearm on the wall. Perform 2 sets of 10 and then retest your baseline movement.

R) Side Glide



L) Side Glide



If any of the above exercises helped reduce your pain then there is a good chance that part of your pain is spinal referred pain. Our spine influences our entire body and I am still shocked to this day how often pain completely unrelated to the spine is improved when performing repetitive spinal movement exercises. Whatever exercise improved your pain the most, you will perform that exercise 5-10 reps every 1-2 hours. I know it's a lot but dosage matters with pain and the more you perform the quicker your pain will get better.

But those exercises didn't help...

If the above exercises did not change your symptoms then there is a good chance your pain is not referral from the spine and is from local tissues. A good way to think about how the body work is to picture the body a system of levers and pulleys. The body is also a continuation of tissue from muscle to muscle. Many times we think that muscles stop and end at a certain location and there is space between these muscles. In reality, the body is interconnected by muscles and soft tissue. There is no space between groups of muscles. Muscles look like one piece of tissue rather than delineated.

Knowing that tissue is connected to each other, think of the entire back side of your body from head to your toes as one tissue. If you want to nerd out, there are some cool pictures of this online. Pain in your arch/heel can be caused or influenced by any muscle on the back side of the body. Here are the most common ones I've noticed in practice

Arch muscles:

This may seem obvious but many times working through the arch helps reduce tension and pain on the heel and arch. Below is a video that we send to our patients. To find the right place to work on, scan the tissue with the ball. When you find a spot that is more tender, place pressure on the ball and now curl your toes up and down. You should feel the tissue move under the ball. Pressure with movement is always preferred then just pressure.

Lax Ball Rollouts



Gastroc/Soleus Complex (Calf muscles):

These muscles are a continuation of your arch muscles as the tissue wraps around the heel and forms the achilles tendon. Again, think of a pulley system here. If the calf is restricted or tight, this can create tension along the entire tissue, including the arch.

There are many ways to work on the calf and soleus but here are some of our favorite exercises:

Calf smash



1/2 Kneeling dorsiflexion stretch



You can add a floss band or voodoo band for this exercise as well. Wrap the band tightly around the shin starting from the top of the ankle to mid shin. The voodoo band make a huge difference.

Tri Planar Calf Leg Swings



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If you are experiencing arch or heel pain when training, running, or even just living your life. Perform a few of these exercises, including the spine ones from above (if they helped) a few times a day. If the spinal movements helped, perform those several times a day. Many times modifying your training will also help reduce tension for the time being while the exercises help mobilize your tissues. Shoes are also an issue that needs to be considered. Consider how many miles you have in shoes and if you've recently changed shoes prior to your pain.

Wahhhhh, nothing helps!!!

If nothing helps or only helps for a short period of time, I suggest you seek out a health professional that is experience treating runners. A good clinician will try to avoid shutting you down and will find modifications for your activity. A good clinician will always combine manual therapy work with exercises and rehab for your injury. Take care of your pain before it shuts you down and you have stop your training cycle.