Achilles Eccentric Strengthening

Tendinotic changes of the achilles and the resulting pain is often treated initially with a course of exercises designed to biologically alter the cause for pain. While these exercises can be performed without supervision, I typically recommend the oversight of a physical therapist who is well versed specifically in these exercises.

There are several principles to follow with an eccentric strengthening program. The most important is actually doing the exercises. I guarantee they won’t work if you don’t do them! Also it is important to maintain good posture (form). If you do not, you risk injury to another body part.

This is a strengthening program not a stretching program. In fact in cases of non-insertional tendinosis, the achilles is often already overstretched.

The eccentric strengthening program needs to be performed several times daily!

Initially you may notice that it takes very little exercise to cause discomfort, but with time it should take more weight (resistance) to cause the same discomfort.

As you progress with the exercises, you should continue to add weight (imaging you’re strengthening the muscles).

Increasing your body’s ability to heal

There are times when a well performed Eccentric Strengthening program does not adequately alter the local biology and the pain continues. In these cases, I often suggest that I perform a PRP injection done in our office under ultrasound guidance.

Surgical Management

With the combination of eccentric strengthening and PRP injections, I have not found surgical management of non-insertional achilles tendinosis is rarely necessary. However, studies to date have shown that insertional achilles tendinosis does not respond as well to any non-operative measures. For these cases that still have pain that interferes with daily activities, I offer outpatient surgical options that allow early weightbearing.

Schedule an appointment:
If you have questions, feel like you are an appropriate candidate for treatment or wonder about your diagnosis.
Achilles Eccentric Strengthening Technique

Eccentric refers to the portion of a motion cycle that is occurring while the muscle is lengthening. So, for the achilles (and associated calf muscle) this starts with the heel raised:

It ends with the heel down:

Weight is then removed from the foot, and using the other leg, the foot is returned to the starting position with the heel up.

This is repeated, and as it becomes more tolerable additional weight is added. This can be done via a backpack with weights or books, or through use of a machine designed for calf strengthening. It is advised that you work with a physical therapist to perform these exercises and avoid injury.