

Chronic Pain After an Ankle Injury

(Even if You've Had Surgery)



An unfortunate part of being human is the fact we all take our bodies for granted until something goes wrong. We just don't consider—because we don't have time to think about it—how much our bodies do for us. This is especially true for our feet and ankles.

If you take just a quick moment right now to think about it, our lower appendages allow us to stand, move around, and generally have our independence.

As such, it can be rather frustrating when you suffer an ankle sprain or severe ankle injury while participating in your favorite sport or physical activity, or even working around the house.

Of course, that frustration is raised to a whole new level when the pain is prolonged beyond what you would normally expect. In fact, it may have been longer than six months since your ankle injury and you are still having severe symptoms keeping you away from the things you love doing!

Part of that building frustration can be the fact this isn't a normal experience.



If you suffered a sprain, you were told it would take a certain amount of time to recover. It's quite likely your treating physician followed the appropriate guidelines established by the American Academy of Orthopedic Surgeons for ankle sprains of varying severity:

- In a Grade I sprain, you will regain full mobility in about 2-4 weeks with proper care and treatment.
- In a Grade II sprain, your recovery time is closer to 6-8 weeks (again, with proper treatment).
- In a **Grade III sprain (or an ankle fracture)**, there's a decent chance surgery was needed to repair damaged ligaments, and full recovery can take up to 6 months.

This means if you are still having severe pain six months or longer following your ankle sprain (or the surgery you had to repair a sprained ankle), there could be a problem with nerves in or around the ankle.

Your first step for addressing the lingering pain following an ankle injury is to have your treating physician reexamine the affected ankle. If he or she tells you everything looks normal from a structural perspective, you may want to <u>seek a second</u> opinion to confirm this.

Now, if you've been assured everything looks fine—and yet you are outside of a typical recovery period and still have severe pain—the core issue may be nerve-related. When this is the case, the nerve injury needs to be addressed to help bring resolution and prevent the problem from becoming worse or permanent.



How to Know if Your Pain is Neuropathic

Based on those aforementioned recovery guidelines, you may be quite frustrated and wondering why your pain has not resolved in a timely manner.

Further, you may find the type of pain you are experiencing to be different than what you've had before or can reasonably expect from an ankle sprain or fracture. In this context, the odds are rather high you are experiencing neuropathic pain.

So what do we mean by "neuropathic" pain?

Whereas the pain normally caused by an ankle sprain is orthopedic in nature—which basically means "relating to muscles, bones, and connective tissues"—chronic pain lasting greater than six months after your injury or surgery can be caused by injured, stretched, or compressed nerves. This is what we mean by neuropathic.

More specifically, the neuropathic pain from an ankle sprain or ankle surgery can lead to symptoms which can include:

- Feeling as though you are walking on shards of glass or sharp rocks
- Feeling as though your foot is wrapped in barbed wire
- Feeling as though you have a severe sunburn on the top of your foot or electrical current shooting down your leg
- Burning, tingling, "pins and needles," or sensations of bugs crawling on the top or bottom of an affected foot
- A sensation that bees are repeatedly stinging or fire ants keep biting your foot

- Severe discomfort in the top, side, or sole of foot from just wearing socks and shoes
- Intense pain from light objects, like a bedsheet touching an affected foot
- Pain that makes it difficult to sleep and wakes you up during the night
- Weakness in ankle and toe leading to difficulty with walking
- Pain in the scar or surrounding area (if surgery was performed)
- Numbness

We know these are the symptoms because Dr. Williams has been able to treat numerous patients who have used these <u>exact</u> words (and ones similar to them)!

Why You Have Neuropathic Pain 6+ Months Following An Ankle Injury Or Surgery

As an oversimplification, the reason you might be having neuropathic pain is because some kind of damage or injury has happened to nerves in the affected leg, foot, or ankle.

Let's take a look at some more specific reasons as to why this happens:

• Nerves damaged during injury. In some cases, nerves are stretched, torn, or pinched (entrapment) as the result of a direct blow, pressure during the actual injury, or physical stretching when the ankle turns in on itself.

Stretching or tearing can take place when the foot suddenly and forcefully twists beyond its intended range of motion. This happens to connective tissues—which is why the condition is designated as a "sprain" in the first place—but it sometimes also happens to nerves in the ankle area as well. Imagine injuring yourself with enough force to rupture a tendon, and then think about what that force can do to a nerve tissue!

Entrapment may occur as the result of internal bruising or bleeding as nerves travel through tight anatomical tunnels found between the knee and the foot. Within this region, there are several locations wherein nerves pass through narrow points. It is within these anatomical tunnels (such as the tarsal tunnels or fibular tunnel) nerves can become pinched and cause neuropathic pain.

Entrapment can also be the result of inflamed tendons pressing against a nerve, or your bodyweight pushing down on the nerve when the foot is out of its natural positioning. If this is the case, then one goal is to regain natural, normal posture, position, and mobility to improve nerve function—which is something that could possibly be achieved by a multi-disciplinary team.

Nerves damaged during surgery. As we mention at various points throughout our website, even
the best surgeon in the world using the best current techniques available may still inadvertently
cut nerves when performing a surgical procedure. This is just a matter of needing to cut through
outer layers of tissue to reach the point in need of repair and may not be avoidable.

In other words, a nerve cut during surgery is not necessarily the fault of your surgeon. In all likelihood, he or she was taking every precaution necessary – the human body's nervous system is simply quite vast. For context, imagine trying to move a spider web out of the way, but without breaking it. Well, that's a fairly analogous situation.

Even though the results were not intended, the fact of the matter is this happens from time to time. When it does, Dr. Williams has techniques that may be able to help.

Nerves trapped in scar tissue. Let's say that you did not injure any nerves during the injury and your surgeon was able to avoid any
direct damage to nerve tissues. Well, it's still possible you are experiencing neuropathic pain after the procedure.

In this instance, the key issue could be a nerve trapped in scar tissue that developed following the surgery. To give this situation some perspective, you can think of it as being like steel-reinforced concrete being poured. Using this analogy, the steel rods are nerves and the cement is the scar tissue.

At first, before the cement has been poured, a steel rod can move with ease. After the pour, and before the cement hardens, the rod can still be moved around a bit. Once the cement has fully cured, however, trying to move the bar is impossible. This is similar to a nerve being trapped in scar tissue.

Additionally, there are other situations wherein the nerve is not inside the scar tissue, but rather being pressed by it. This external pressure can impair or cut off the nerve's ability to relay signals to your central nervous system.

There are several nerves that can be stretched, damaged, or otherwise impacted by an injury or surgery to correct the injury. These include the common peroneal nerve and its branches (including deep and superficial peroneal nerves); the sural nerve; and the tibial nerve and its branches (the medial plantar and lateral plantar nerves).



Why Didn't My Doctor Catch This?

It's natural for patients to wonder why his or her treating physician didn't catch this problem.

Your doctor probably used imaging tools like an X-ray, MRI, or CT scan to evaluate your condition and try to determine what is wrong. These are great tools for assessing musculoskeletal problems, but are often suboptimal for evaluating the peripheral nervous system. Nerve injuries are too difficult to see in these particular modalities.

Many doctors will even send you to undergo tests specifically for nerves, like EMG (electromyogram) tests and nerve conduction studies, to measure and record electrical activity within muscles and skin. This is often the right path—Dr. Williams will also order EMG testing to aid in his diagnoses (if they hadn't already been done)—but while a positive test is helpful, a negative result does not always rule out a problem. Further, many nerve injuries may not show up on EMG and conduction tests, and it can be highly frustrating when test results appear normal—yet you still have pain.

Accordingly, these tests **CANNOT** be the sole basis of diagnosis.

That said, electrical tests are frequently quite beneficial and can point a patient and physician in the right direction. Dr. Williams works with local radiographers who are trained in magnetic resonance neurography (MRN), which is beneficial in diagnosing many patients who suffer from nerve injury.

So, from his or her perspective, everything your doctor saw was perfectly normal. Since it is impossible to treat "normal," you may have been diagnosed with causalgia, chronic regional pain syndrome (CRPS), or reflex sympathetic dystrophy (RSD), and then referred to a pain management specialist. In some cases, it can even be implied you're making the whole thing up – even though you are truly in severe pain!

The truth of the matter is that a doctor usually does everything within his or her capabilities, but no doctor is trained on every area of the human body. Humans are complicated structures and it would be virtually impossible to have a thorough understanding of all human anatomy (along with all of the possible medical issues we can experience!).

As an example of that, you wouldn't come see Dr. Williams for treatment to fix your ankle bones, or if you have a heart attack or prostate cancer!

Fortunately, doctors specialize in specific areas. Dr. Williams specializes in treating patients who are suffering from problems in the peripheral nervous system like this. He can use physical examination, medical history, nerve blocks, advanced imaging studies, and, as noted, MRN, EMG, or sensory testing when trying to pinpoint the source of your persistent pain.



The Pain Is Challenging...But We May Be Able To Help!

In all likelihood, you initially hurt your ankle doing something you enjoy doing. Sure, not all ankle sprains are sustained during sports—while we all want to be weekend warriors, there are less-glorious ways to sprain an ankle, like raking leaves, walking down the stairs, slipping on ice, or even after too many adult beverages!—but a significant number do happen during basketball games, CrossFit events, trail running, and other recreational activities people enjoy doing.

If it is possible, <u>we want to get you back to the activities you love!</u> (And those activities that make life happen—shopping, driving, and even just walking without pain.)

Remember, your starting point in this process is to have your ankle reassessed for any potential musculoskeletal issues. If you have a damaged tendon, a podiatrist or orthopedic foot and ankle surgeon should be able to help. It is important to make sure this problem is not orthopedic in nature before coming to see Dr. Williams for a consultation.

As we noted earlier, Dr. Williams specializes in peripheral nerve injuries. If your condition can be resolved with screws and pins—which are orthopedic solutions—he is not the doctor you need to see.



So you've had the ankle reexamined and have been diagnosed with chronic pain, causalgia, CRPS, or RSD (since everything appears as it should from a structural perspective). Perhaps you've been issued crutches or a walking boot to support and help keep weight off the affected foot, and prescribed pain meds. It's also fairly likely you were referred to a physical therapist and/or pain management specialist, but none of this is making the problem better.

To put it simply—If your situation is not improving after all of that, please come see us! We want you to get better—and we may be able to help!!

Dr. Williams has successfully treated many patients who were basically going through the same experience you are. Sure, every case is different—which means it's not exactly the same—but Dr. Williams has techniques that may be able to address the core issues and help you find relief.

How does this happen?

Well, the first step is to identify why you are having the chronic neuropathic pain.



As we've discussed already, there are some common reasons for nerve pain after an ankle injury, so Dr. Williams starts by assessing your situation with a careful review of your medical history and records, and by actually listening as you describe the initial injury and symptoms you are experiencing and would like to see improved.

Once Dr. Williams identifies the issue causing your pain, he will decide if any of his available techniques could be right for you. Depending on your specific case, you may potentially benefit from procedures like nerve decompression, repair, transfer, grafting, or removal.

Dr. Williams and you will then discuss your options together, including his professional recommendation, to decide what may be an appropriate path forward.

Even though he provides surgical solutions, Dr. Williams will always discuss nonsurgical options that could be available—even if it feels like you've tried everything and all options are exhausted.

Regardless as to what other doctors may or may not do, Dr. Williams will take the time to listen to you and never rush you out of the office. He also will not move forward unless you feel 100% comfortable with the recommended approach. Together, you will spend plenty of time discussing the situation and Dr. Williams will answer any questions you might have.

Why Dr. Williams Is <u>The Right Choice</u> For The Relief You Need

Dr. Williams is board-certified in Plastic and Reconstructive Surgery, as well as being trained in General Surgery. He has been a full partner at the world-renowned Dellon Institute in Baltimore, MD since 2010—dedicating the majority of his time to caring for patients suffering from peripheral nerve injuries.

Since 2007, Dr. Williams has been focused on providing surgical care and rehabilitation for lower extremity peripheral nerve injuries, including those sustained from ankle sprains and fractures, and the surgeries to repair those same ankles. Along with treating nerves in the lower extremity, Dr. Williams also specializes in upper extremity, trunk, thorax, head, and neck peripheral nerve injuries.

Additionally, Dr. Williams has independently developed procedures to improve sensation, muscle function, and relieve pain in the lower extremities, and has been part of the team that has helped describe many other advancements in peripheral nerve surgery and peripheral nerve imaging. Dr. Williams has written and co-authored multiple publications in the field.

Get Help Today!

If you've been living with neuropathic pain six months (or longer) following an ankle sprain or fracture, you aren't getting better, and other doctors don't have an answer—contact us!

Request a consultation with Dr. Williams today. Call our Baltimore office at (410) 709-3868 and one of our team members will be happy to help schedule your appointment.

