

SPORT + SPINE

The Intersection of Performance + Wellness

DRY NEEDLING

Dry needling is a tool used to release muscle tissue. It doesn't just treat the symptoms — instead, it addresses the cause of pain. Physical therapists insert thin needles into trigger points, relieving tension and giving healing a jump-start.

HOW DOES DRY NEEDLING WORK?

Patients may become interested in dry needling as a way to relieve that muscle pain, but pain is just the symptom. Dry needling restores the mobility necessary to get to the root of the problem.

Dry needling acts as a hard reset: like rebooting a computer, dry needling resets the dysfunctional muscle. Spontaneous electrical activity occurs in that dysfunctional muscle, and needling quiets that spontaneous electrical activity to allow for normal function.



Our body's natural response to pain is to go on the defensive. When an injury occurs, either from repetitive use or acute trauma, that muscle becomes inflamed and overstimulated, causing pain.

Damaged muscles create scar tissue and shift into a protective-yet-painful state of constant contraction. Pain results in our body's creation of more chemicals, which causes our muscles to build more chemical receptors. Your muscle experiences more stimulation, more blood flow and more tension.

As anyone who's been injured has experienced, one injured muscle can cause many more problems to other body parts too. Limited mobility comes as a result, creating greater stress on the body's joints. Other parts of the body step in to overcompensate, and so the way we move may begin to change for the worse.

Physical therapists insert a thin filament needle into the overstimulated, tight or painful muscle. When the needle is inserted into the skin and the muscle, that local twitch response is an involuntary reflex, which quiets the muscle, allowing it to resume normal activity. One treatment session may involve multiple needles, depending on the type of injury and pain. The needle gives the muscle a blank slate, and helps restore the proper function.

WHY DOES DRY NEEDLING WORK?

As dry needling resets a dysfunctional muscle, the stage is set for proper function once again.

The treatment works because it kick-starts muscle restoration. That hyper-stimulated muscle has been returned to its natural state, and tension and inflammation decreases as a result. This means less pain in the injured muscle.



That now-functional muscle also returns to full mobility and greater stability. Before needling, the body was responding by overusing other muscles and working inefficiently. But after dry needling, that decreased tension leads to a greater range of motion. For high-level performance, we need every part of our body working together like a well-oiled machine. A reset of one muscle positively impacts the entire system.

Used in conjunction with physical therapy, dry needling offers patients increased function, improved stability and decreased pain. This lays the groundwork for patients to make more progress in physical therapy. Increased mobility allows patients to work on joint and tissue strengthening through stretching, exercising and other physical therapy techniques.

WHAT'S THE DIFFERENCE BETWEEN DRY NEEDLING AND ACUPUNCTURE?

Because it involves a needle, dry needling is often misunderstood as acupuncture. The difference lies in the approach — same needle, different technique.

The ultimate goal of dry needling is different than acupuncture. Acupuncture is typically used in holistic medicine. Dry needling, in contrast, is used for a musculoskeletal purpose. Designed to reset a dysfunctional muscle, dry needling releases tension and quiets an overstimulated muscle.

Acupuncture is based on eastern medicine, and acupuncturists insert needles based on body meridians. Dry needling, in contrast, is based on western medicine and the science of neuromuscular function. It's a professional physical therapy technique that gets to the root cause of the pain and is designed not only to decrease muscle pain, but also to increase mobility and stability.

DOES DRY NEEDLING HURT?

Patients frequently wonder if dry needling is painful. It may be uncomfortable, and only for a second. But the needle isn't what causes the pain.

Minor muscle soreness may happen afterwards, but nothing more painful than what we may feel after a good workout. Pain rarely lasts for more than a day.

Furthermore, this minor pain is the only side effect. This makes dry needling a sustainable approach to post-injury restoration.

It's easy to blame the pain on the needle. But what really causes pain isn't the needle being inserted; it's the muscle reacting to the needle. This twitch response is typically more painful during the first dry needling treatment, and as the muscle function is restored, future treatments are less uncomfortable.

WHAT ARE THE RESULTS AND BENEFITS OF DRY NEEDLING?

Dry needling doesn't just treat symptoms. Because it addresses the root cause of pain, it offers a wide variety of benefits, and without the side effects of other treatments.

Many patients become interested in dry needling as a way to relieve muscle pain, and that's a key benefit of the treatment. Needling stimulates the muscle's healing process, resulting in a muscle reset. For many patients, pain relief happens instantly.

Dry needling results in greater mobility, often immediately. The needling stimulates the muscles, which allows



for better lengthening of both soft tissues and muscle. As a result, patients enjoy a wider range of motion.

Alongside greater mobility, another long-term benefit of dry needling is injury prevention. As proper mobility is restored, the body returns to natural, healthy and full function. This decreases the risk of injury as the patient returns to favorite activities, exercises and sports.

And enhanced performance is another dry needling benefit. For high-level performance, all parts of the body need to be working together. Dry needling results in lengthened muscles, setting the stage for better function and performance. This benefit makes the treatment especially popular with professional athletes — but the results can be seen in everyday activity and exercise too.

Dry needling results in fewer side effects. Many pain relieving medications, particularly prescriptions, can bring negative side effects. In contrast, dry needling is a natural solution with no long-term risk. While pain relievers have limited doses for a reason, dry needling can be repeated as needed without risk to a patient's body. Downtime for recovery is minimal as well. And another dry needling benefit is financial: less expensive than steroid treatments and surgeries, it's a sustainable treatment.

IS DRY NEEDLING A ONE-TIME TREATMENT?

Physical therapists recommend three treatments at first, keeping an open dialogue about how it's working.

Like all medical treatments, how many dry needling sessions a patient needs depends on the individual situation. Dry needling offers an instant improvement. Many patients experience less pain and more motion immediately after the treatment. But dry needling isn't a quick fix.

Physical therapists recommend three treatments at first; an average patient experiences between six and eight treatments for full healing. Sessions should be spaced out with at least a week between each, so the muscle has time to recover. As patients recover, treatments may only be required every few weeks, and then as little as once a month.

But for a small injury, when it's addressed early, just one treatment may be enough. Long-term injuries change the way the body moves and functions. So the more quickly the injury is caught, the less needling is required; it's simply a smaller problem to fix.

ABOUT SPORT + SPINE

At Sport + Spine, we believe in life without limits. We believe the athlete in all of us deserves top performance — free from pain and limitations. Whatever your sport or activity may be, our elite and educated physical therapists get you to the finish line.

Based in the Kansas City suburb of Overland Park, our physical therapist-owned clinic offers highly specialized, one-on-one rehabilitation for complex joint, spine, pelvic and sporting injuries, including post-operative care. We are on your team with activity based performance programs, getting you to your personal best.

It's a physical therapy experience unlike what you'll find elsewhere: industry-leading experts and an innovative approach to your wellbeing. To learn more about dry needling, as well as our other physical therapy services, call **913.642.7746** or visit **SportSpineKC.com**.