# A Patient's Guide to ANKLE PAIN

Improved Treatment for Common Ankle Conditions with Active Release Treatment

Dr Jason Gray BHK DC MSc Dr Stephanie Gray BSc DC





# **Improved Treatment For Ankle Pain**

# Resolving Common Ankle Conditions with Active Release Techniques

By Dr Jason Gray BHK DC MSc & Dr Stephanie Gray BSc DC

Do you experience ankle pain with walking, standing, or at work? Does ankle pain or Achilles tendon pain prevent you from enjoying activities like running, golf, or other sports?

If so, you are not alone. In fact, ankle pain is one of the most common and frustrating musculoskeletal problems.

What makes things even worse is that traditional treatments such as medications, injections, modalities such as e-stim or ultrasound, and even stretches and exercises for ankle pain or Achilles tendon problems are often slow to provide relief. And surgery is rarely an option.

But fortunately there is some good news.....

A new treatment technique known as Active Release Techniques (ART) is proving to be a very effective method to resolve many common ankle conditions such as Achilles tendinopathy / Achilles tendinitis, chronic ankle sprains and ankle ligament problems, and tibialis posterior tendonitis.

If you are not familiar with ART treatment don't worry. This is a relatively new treatment method. So what we will do in this Ankle Pain Guide is discuss the basics of what you need to know about ankle pain, including a review of ART treatment.

Here are the key things we will cover....

- 1 The underlying cause of virtually every ankle problem
- 2 Why traditional treatments are often ineffective or slow to provide relief
- 3 What ART Treatment is... and how it is so effective in treating ankle pain

# **What Causes Ankle Pain?**

Whenever patients come into our office we like to make sure they have a basic understanding of their problem.... not just their diagnosis, but also what has happened that has caused their problem in the first place. When patients grasp this it is much easier for them to understand what needs to be done to fix the problem.

While there are many different ankle conditions almost every case of ankle pain shares a common underlying cause. Of course there will be some differences with respect to exactly which muscles or joints have become injured, but the mechanism of how those tissues become damaged and irritated is essentially the same with virtually every ankle condition.

So lets take a look at how the ankle becomes injured in the first place.....

# Muscle Strain, Muscle Scarring, and Ankle Pain

The ankle is a critical area in the body as it forms the connection between our foot and the rest of our body. A healthy, strong, and flexible ankle is essential to stand, walk, run, and climb stairs properly.

To move and protect the ankle the body relies on an intricate set of muscles, tendons, and ligaments that surround the ankle. In fact, there are 11 separate muscles and 9 different ligaments that all act to directly control and stabilize the ankle joint.

However, most of these muscles are small and have to work hard to with even basic activities such as walking, or climbing stairs. The demand on these muscles is even greater with physically demanding jobs or athletic activities involving running, cutting, or jumping.



The body relies on an intricate system of muscles and ligaments to position, protect, and control the ankle. If any of these tissues become tight, weak, or damaged the ankle can become compromised and more prone to pain and injury.

This heavy workload can cause the various muscles and ligaments to become strained and fatigued. And over time this strain can develop into small scale tissue damage known as micro-trauma.

Initially this micro-trauma is very small and the amount of damage is not enough be painful. However, this damage still needs to be repaired, which the body does by forming new connective tissue in and around the damaged areas.

This new tissue formation - referred to as scar tissue or soft tissue adhesions - itself is not a problem. In fact, it is a normal and necessary part of healing. But a big problem does occur when the ankle is subjected to the same amount of stress and strain over the course of weeks and months.

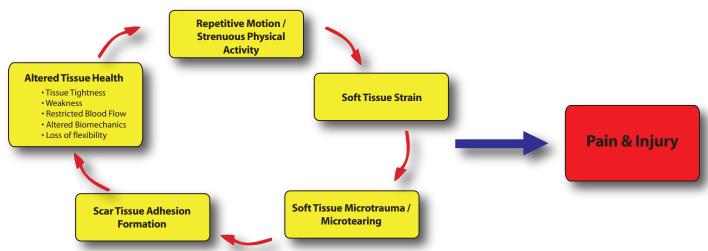
When this happens the ankle becomes caught in a repetitive strain cycle in which the same muscles and/or ligaments are damaged and subsequently repaired over and over again. This process is associated with more and more soft tissue adhesion formation.

Think of these adhesions like rust and grime that can build-up in an automobile. Normally the parts of the car should be well oiled and move smoothly but when rust and grime are allowed to build-up the car begins to break down until eventually it does not work properly and repairs are needed.

And just rust will start to cause a car to breakdown, as these soft tissue adhesions begin to build up in and around the ankle it leads to problems such as tightness, muscle weakness and diminished endurance, restricted joint motion, and diminished blood flow.

These adhesions are also very sticky and can cause the various muscles and ligaments to become stuck together. This will compromise the muscles ability to slide against each other, further compromising flexibility and strength.

## The Repetitive Strain Injury Cycle



As this repetitive strain cycle continues at some point a symptomatic threshold is reached and pain will develop. Although the pain and symptoms associated with most cases of ankle pain often seem to occur out of nowhere or after a routine activity you can see that the problem has actually been slowly developing over time and the onset of symptoms is often just the straw that broke the camel's back.

# The Problems with Traditional Ankle Pain Treatment

In an attempt to treat ankle pain a variety of treatment methods are used. Some of the more common approaches include anti-inflammatory medications, injections, rest, ice, orthotics, ankle braces or splints, ultrasound (US), muscle stimulation (E-Stim), or stretching and strengthening exercises.

Unfortunately, most of these techniques generally require a long period of time before they provide any significant relief and in many cases provide only temporary relief from ankle pain....assuming they help at all.

The reason these approaches are often ineffective is they fail to address the underlying scar tissue adhesions that develop within the muscles and ligaments. Remember it is these adhesions that are making the muscles and ligaments tight and weak and binding the tissues together.

Passive approaches like rest, ice, medications, injections, and modalities like e-stim or ultrasound primarily focus on symptomatic relief and do nothing to address the muscle restrictions and dysfunction. Orthotics are occasionally helpful but only in a small number of cases.

And even when orthotics are indicated they are only helpful with improving the alignment of the foot and ankle. They do nothing to treat the underlying scar tissue tissues adhesions or to improve muscle strength or flexibility.

More active approaches such as stretching and exercises are often needed for full rehabilitation of the condition and to restore full strength and function of the muscles. However, they themselves do not treat the underlying scar tissue adhesions.

In fact, without first addressing the scar tissue adhesions stretches and exercises are often less effective and much slower to produce relief or recovery from ankle pain.



# Improved Treatment for Ankle Pain with Active Release Techniques

So if all of these traditional treatments not very successful for ankle pain, what is the solution?

Well without a doubt we have found that Active Release Techniques (ART) treatment is the most effective, quickest, and most lasting treatment solution for ankle pain.

Active Release Treatment (ART) was developed about 20 years ago by a doctor in the United States. This may seem like a long time but as far as treatment techniques go it is actually quite new - but it is making a big impact in health care and is becoming the treatment of choice for many musculoskeletal problems.

So let's take a look at exactly what ART treatment is and why it is so effective if treating ankle pain....

# What is ART

Active Release is a hands-on treatment method to address problems in the soft tissues of the body, including the muscles, ligaments, fascia, and nerves. What makes ART different from other treatments is that it is specifically designed to identify and treat scar tissue adhesions that build up and compromise tissue health.

By locating and treating the soft-tissue adhesions with ART it allows the doctor to 1) break-up restrictive scar tissue adhesions, 2) restore normal movement and sliding of the muscles and nerves, and 3) more completely restore strength and flexibility of the muscles and ligaments which protect and control the ankle.

When performing an ART treatment the doctor will first shorten the muscle, tendon, or ligament and then apply a very specific pressure with their hands along that structure. To assess the area the doctor will then stretch and lengthen the tissue underneath their hand contact.

As the tissue slides underneath our contact we are able to assess the texture and

tension of the tissue to determine if it is healthy or contains scar tissue adhesions. When scar tissue adhesions are felt the amount and direction of tension can be modified to break-up the scar tissue and free the problematic area.

ART takes a long time to master and after years of practice ART docs are able to develop a very acute sense of touch and feel. This not only helps us to know exactly which muscles or ligaments have become restricted and damaged, but also helps improve treatment results by allowing us to be very specific with treatment.

This is something that cannot be done with other treatment methods or with stretching or exercises which target the ankle muscles in a more generalized fashion.

An additional benefit of ART is that it allows us to further assess and correct problems not only at the ankle but also in other areas of the kinetic chain - for example at the foot, knee, or hip.

Even if these areas have not yet become painful they can impact how the ankle moves and how it is positioned with activities like walking, climbing stairs, and running. Clearing problems at these areas will often play a critical role in getting the ankle pain to resolve, especially with stubborn or recurrent ankle pain.

# **How Long Does It Take to Resolve Ankle Pain?**

One of the best things about ART is how quickly results are felt. In our experience the majority of Ankle Pain cases respond very well to ART treatment, especially when combined with the appropriate home stretching and strengthening exercises. Although each case is unique and there are several factors that will determine the length of time it will require to fully resolve a condition, we usually find a significant improvement can be gained in just 3-4 treatments.

# **Get Relief From Ankle Pain**

To learn more, or to book an initial appointment to see if ART may be able to help with your ankle problem, simply call our office at (905) 685-7227. For general questions you can either call our office or send us an email at info@graychiropractic.ca - one of our ART certified doctors will be happy to answer any questions you may have.

# **Dr Jason Gray BHK DC MSc**



Dr. Gray is an honours graduate (Cum Laude) of Logan College of Chiropractic in St. Louis, Missouri (2004), and holds a Bachelor of Human Kinetics (Honours, Movement Science) from the University of Windsor. Most recently, he received a Master of Science degree in Kinesiology from Dalhousie University (2011), with a focus on running biomechanics and clinical assessment.

Dr. Gray has been a full-body certified Active Release Techniques provider since 2004, and has advanced training in musculoskeletal rehabilitation, strength training and conditioning, and biomechanics. He has published several articles in chiropractic trade journals and has written about and taught sport performance & injury prevention programs for a number of sports, including golf, running, swimming, and triathlon.

## **Dr Stephanie Gray BSc DC**



Dr. Stephanie Gray is a Doctor of Chiropractic and is co-owner of Gray Chiropractic Spine & Joint Clinic. Dr. Stephanie was born and raised in St. Catharines. She completed her Doctor of Chiropractic degree from Logan College of Chiropractic, St. Louis, Missouri in 2004. She also holds a Bachelor of Science (Honours Kinesiology, Co-op) from the University of Waterloo.

Dr. Stephanie owned and operated a practice in Fall River, Nova Scotia for 9 years before returning to her roots in 2014. While in Nova Scotia, she also served as secretary to the Council of the Nova Scotia College of Chiropractors for 4 years. Dr. Stephanie is a member of the College of Chiropractors of Ontario, Ontario Chiropractic Association, Canadian Chiropractic Association. She has been a full-body certified Active Release Techniques provider since 2004.



Gray Chiropractic Spine & Joint Treatment Centre 40 Tulip Tree Common, St Catharines, ON, L2S 3Y9

Phone: (905) 685-7227 Fax: 1-855-351-7065 info@graychiropractic.ca www.graychiropractic.ca