

A Patient's Guide to **HAND & WRIST PAIN**

Improved Treatment with Active Release Treatment

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GRAYCHIROPRACTIC



Improved Treatment For Wrist and Hand Pain

Resolving Common Wrist and Hand Conditions with Active Release Techniques

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

Hand pain and wrist pain are becoming much more frequent in our world today. What makes matters worse is that these conditions are often slow to respond to traditional treatment methods.

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 for many hand and wrist conditions, such as strains, tendinitis, and even carpal tunnel syndrome.

If you are not familiar with ART treatment you're not alone. This is a relatively new treatment method. So in this article we will discuss the basics of what you need to know about hand pain and wrist pain, including a review of ART treatment.

Here are the key things we will cover...

- 1 - The underlying cause of virtually every case of wrist and hand pain
- 2 - Why traditional treatments are often ineffective or slow to provide relief
- 3 - What ART Treatment is... and how is is so effective in treating these common conditions

How Does Wrist Pain or Hand Pain Occur?

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 wrist and hand conditions almost most share a common underlying cause. Of course there will be some differences with respect to exactly which muscles, tendons, or nerves have become injured but the mechanism of how those tissues become damaged and irritated is essentially the same.

So lets take a look at how wrist and hand pain develops in the first place.....

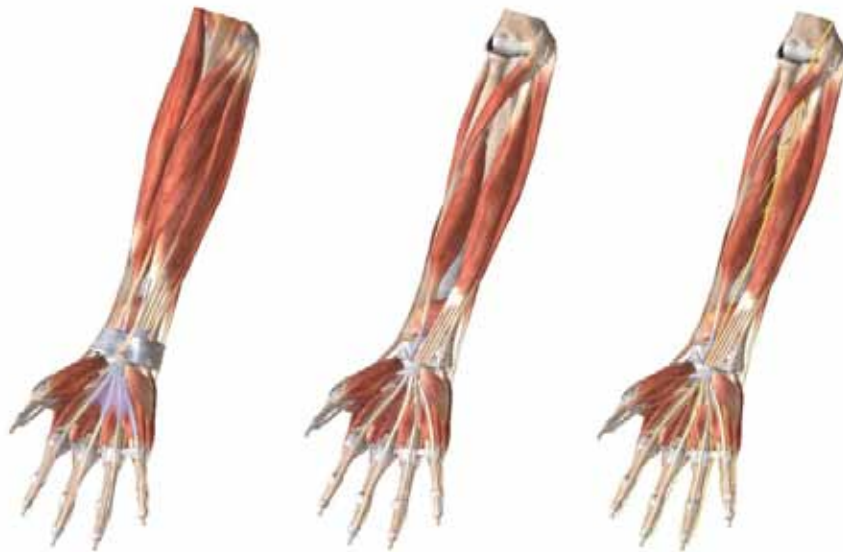
Muscle Strain, Muscle Scarring, and Pain

The body relies on a complex system of muscles to protect and control the wrist and hand. In fact there are more than 30 different muscles that attach to the many bones of the wrist, hand, and fingers.

While some of these muscles are located in the hand itself, others are actually located up in the forearm. These muscles have long tendons that cross the wrist and attach to the bones of the hand and fingers.

Any use of our hands will place some load and stress on the muscles of the forearm and hand. And it is not uncommon for these muscles to become strained or damaged from overuse.

While this is easily understood with physically demanding activities such as lifting, carrying, or pushing, other activities such typing can also be damaging as the muscles must be on for long periods time. This can restrict blood flow and cause muscle fatigue and overload.



The body relies on an intricate system of muscles to move the wrist and hand.

If these muscles become restricted they can not only cause pain and tightness in the hand and forearm, but can also compress the median nerve as it passes down the forearm into the hand.

Over time this strain and overload to the muscles 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 to be painful. However, this damage still needs to be repaired which the body does by forming new connective tissue known as scar tissue or soft tissue adhesions.

This scar tissue itself is not necessarily a problem. In fact, it is a normal and necessary part of healing. But a big problem does occur when the muscles of the forearm and hand are repeatedly stressed over the course of weeks and months.

When this happens the muscles become caught in a repetitive strain cycle in which the same muscles are damaged and subsequently repaired over and over again. This process is associated with more and more scar tissue adhesion formation.

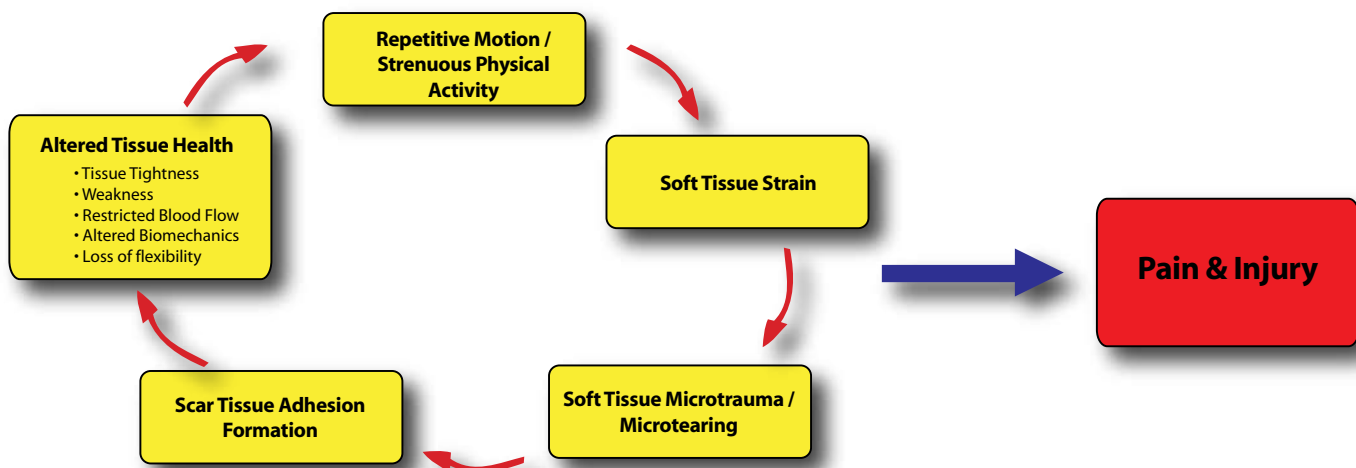
Think of these adhesions like rust and grime that can build-up in an automobile. Normally the parts of the car should be well oiled and move smoothly but when rust and grime are allowed to build-up the car begins to break down until eventually it does not work properly and repairs are needed.

Just like rust, as these soft tissue adhesions begin to build up in and around the hand and forearm it leads to problems such as tightness, weakness, reduced muscle endurance, restricted joint motion, and diminished blood flow.

These adhesions are also very sticky and can cause the various muscles of the forearm and hand to become stuck together. This will compromise the muscles ability to stretch and contract.

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 wrist pain or hand 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 camels back.



The Problem with Traditional Treatments for Wrist and Hand Pain

Some of the traditional treatment methods used for wrist pain and hand pain include anti-inflammatory medications, ice or heat, ultrasound (US), acupuncture, wrist splints, stretching and strengthening exercises, and when all else fails, surgery.

Unfortunately, most of these traditional treatments generally require a long period of time before they provide any significant relief, or provide only temporary relief from symptoms instead of fixing the underlying cause of the problem.

The main reason these approaches are often ineffective is that they fail to address the underlying scar tissue adhesions that develop within the muscles and surrounding soft tissues.

Remember it is these adhesions which are binding the tissues together and making the muscles tight and weak.

Passive approaches such as medications, ice, acupuncture, ultrasound, and braces or splints all focus on symptomatic relief and do nothing to address muscle restrictions and dysfunction.

More active approaches, such as stretching and exercise are often needed to restore full strength and mobility but they do not treat the underlying 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.

Improved Treatment for Wrist Pain and Hand Pain with Active Release Techniques

So if all of these traditional treatments are not very successful for wrist and hand pain what is the solution?

We have found that Active Release Techniques (ART) treatment is the most effective, quickest, and most lasting treatment solution.

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

In fact, virtually every professional sports team has an ART doctor on staff to help keep athletes healthy and performing at top level. And many major employers have also begun to keep ART doctors on staff to reduce workplace injury.

So let's take a look at exactly what ART treatment is and why it is so effective in treating wrist pain and hand 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, 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 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 in the forearm and hand.

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 their 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, 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 muscles in a more generalized fashion.

How Long Does It Take to Resolve Wrist Pain or Hand Pain?

One of the best things about ART is how quickly results are felt. In our experience the majority of wrist and hand pain cases respond very well to ART treatment, especially when combined with the appropriate home stretching and strengthening exercises.

Although there are several factors that will determine the length of time it will require to fully resolve each condition we usually find a significant improvement can be gained in just 4-5 treatments.

Get Relief From Wrist and Hand Pain Syndrome

To learn more, or to book an initial appointment to see if ART may be able to help with your wrist pain or hand pain simply call our office at (905) 685-7227, or book an appointment using our online appointment calander.

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.

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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.



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