A Patient's Guide to **NECK PAIN**

Improved Treatment for Common Neck Conditions with Active Release Treatment

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Improved Treatment For Neck Pain

Resolving Common Neck Conditions with Active Release Techniques

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

Do you experience pain or stiffness in your neck or top of your shoulders? If so you are not alone. In fact, neck pain is one of the most common and frustrating problems that can affect your work, recreational activities, and quality of life.

In many cases neck pain can also lead to headaches, adding further frustration and annoyances.

What makes things even more frustrating is the fact that traditional treatments such as medication, modalities such as e-stim or ultrasound, and even stretches and exercises are often slow to provide relief.

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 neck conditions.

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 Neck Pain Guide is discuss the basics of what you need to know about neck pain....including a review of ART treatment.

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

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

What Causes Neck 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 neck diagnoses virtually every condition shares a common underlying cause.

Of course there will be some differences with respect to exactly which muscles or joints have become injured and the specific location and nature of the symptoms - but the mechanism of how those tissues become damaged and irritated is essentially the same.

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

Muscle Strain, Muscle Scarring, and Neck Pain

The neck is one of the most complex areas of the skeleton. It is made up of 7 different spinal bones stacked together to form a moveable column. Each of the these bones must be able bend, move, and twist which allows us to effectively move the head and neck.

To accomplish this important task the body relies on an intricate system of muscles, nerves, and ligaments that surround the neck.

However, most of these muscles are small and often have to work hard to support and protect the neck. Certain situations such as poor posture or prolonged use of the computer in workplace setting can further stress and overload the support muscles of the neck.

It should also be nored that due to the attachment of many of the neck muscles onto the shoulder blade it is also common for work or recreational activities that involve repetitive pushing, pulling, or lifting to create excessive stress on the neck as well.

This connection between the neck and shoulder girdle is why almost every neck condition also involves some type of shoulder problem. Even if the shoulder itself has not yet become painful problems such as shoulder weakness or tightness often has to be addressed to fully resolve the neck pain.

Over the course of weeks and months this repetitive and postural stress can create small scale damage in the neck muscles known as micro-trauma.

Although initially this micro-trauma is very small and is not enough be painful 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 neck and shoulder girdle are subjected to similar postural or repetitive stress over and over again.

When this happens the muscles of the neck become caught in a repetitive strain injury cycle in which the same muscles experience small scale micro damage and are subsequently repaired over and over again.



The neck relies on a complex set of muscles for proper posture, movement, and protection.

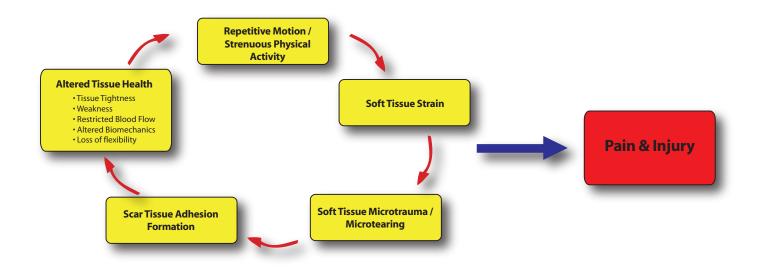
Note how many of the muscles that act on the neck also attach onto the shoulder blade. This is why shoulder problems are so commonly associated with neck pain.

This process is associated with more and more soft tissue adhesion formation which can begin to affect the strength, endurance, and flexibility of the muscles.

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.

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

In many cases these adhesions can even cause some of the nerves that pass through the neck to become stuck against a surrounding muscle and lead to nerve damage. In is actually quite common for a nerve entrapment in the neck to cause neck pain or even pain or weakness into the arm or hand.



As this repetitive strain cycle continues the muscles will no longer be able to protect and control the bones of the neck properly resulting in stress and overload to the joints of the neck as well.

As the neck becomes more and more compromised at some point a symptomatic threshold is reached and pain will develop.

Although the pain and symptoms associated with most cases of neck 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 Problems with Traditional Neck Pain Treatment

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

Unfortunately, most of these methods generally require a long period of time before they provide any significant relief and in many cases provide only temporary relief from neck pain....if 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 neck and shoulder muscles. Remember it is these adhesions that are making the muscles and fascia tight and weak, binding the tissues together, and possibly pinching or compressing the nerves.

Approaches like rest, ice, medications, and modalities like e-stim primarily focus on symptomatic relief and do nothing to address the muscle restrictions and dysfunction.

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 neck pain.

Improved Treatment for Neck Pain with Active Release Techniques

So if all of these traditional treatments not very successful for neck 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 virtually every common neck pain condition.

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 an big impact in healthcare and is proving to be a very effective treatment for many musculoskeletal problems.... including neck pain.

So let's take a look at exactly what ART treatment is and why it is so effective if treating neck 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 are making the muscles tight and weak.

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 3) more completely restore strength and flexibility of the muscles which protect and control the neck and shoulder.

There are even specific treatment protocols to release compressed and entrapped nerves with the neck and shoulder.

When performing an ART treatment the doctor will first shorten the muscle, tendon, or nerve and then apply a very specific pressure with their hands along that structure. To assess the area the doctor will then stretch 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.... or in the case of the nerves whether they are sliding properly or getting stuck on an adjacent muscle.

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 helps us to know exactly which muscles or nerves have become damaged or restricted. It also helps us to be specific with treatment.

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

How Long Does It Take to Resolve Neck Pain?

One of the best things about ART is how quickly results are felt. In our experience the majority of Neck 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 Neck Pain

To learn more, or to book an initial appointment to see if ART may be able to help with your neck 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.

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 fullbody certified Active Release Techniques provider since 2004.



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