

The Most Common Reason Pain Does Not Go Away

Why Pain?

Doesn't your body have the ability to heal itself? When you cut yourself, or break a bone, the body will mend it. So what about the injured area that is affecting you now? Why hasn't it healed and why does your pain still linger? The most common reason is ...



Adhesions anywhere in the muscles, tendons or ligaments can result in imbalance, breakdown and pain. This is because of the effect adhesions have on the muscles.

Myofascial Adhesion and Fibrosis (Scar Tissue)

Many individuals with soft tissue injuries will describe a sensation of something pulling, or tight, or catching within the affected area. They have a perception that the area just isn't working right, or that there is a feeling of "weakness" in there. What they are experiencing is a buildup of scar-tissue or adhesions. Adhesions will:

- **Cause muscles to "catch" between each other** — For example, an adhesion between the ROTATOR CUFF and DELTOID will prevent the two layers from gliding smoothly over each other. The result is pain as the two tissues tug against each other when raising the shoulder.
- **Cause weakness** in a muscle by shortening the resting length of the muscle, thereby preventing the muscles from contracting or shortening efficiently.
- **Cause repeated injury.** Adhesions lead to tight areas within the muscles that cause repeated strain or microscopic tearing every time we stretch, contract or use the muscles.
- **Prevent adequate blood flow** (causing Tissue Hypoxia) to the area of the muscle, tendon or ligament that is affected. Inadequate blood flow can lead to further tissue damage and repeated inflammation. This leads to a constant ache within the injured area.
- **Restricts and binds nerves** that pass through or near the adhesions.
- **Create biomechanical imbalance** (or abnormal biomechanics) within the soft tissues of the affected area when they are being bound or restricted by an adhesion. This is particularly true when the affected tissues are "Joint Stabilizers" (i.e. Shoulder/Rotator Cuff, Hip, Knee, Elbow, and Ankle). When the function of the stabilizer muscles are being impaired by adhesions, this leads to imbalance and aberrant motion of the joint, causing strain and injury to surrounding muscles, tendons and ligaments.

How Chiropractic and ART work together:

Chiropractic works well to release joint capsule restrictions and to restore motion back to fixated joints, however these joint restrictions will often return if the original soft tissue problem(s) are not addressed. Since muscles and ligaments attach to bone directly, they will pull onto the affected joints, forcing them back into fixation and/or misalignment if the restricted/tightened tissues are left untreated. This phenomenon explains the reason why many patients feel GREAT immediately following an adjustment, but then felt like they were stiff again a day or even a few hours later. Without ART, the results of Chiropractic are often limited in their ability to provide complete resolution for many musculoskeletal problems.

The three most common ways your body creates myofascial adhesions

Injuries that result in adhesion can occur in not-so-obvious ways. Perhaps you will be able to figure out which mechanism of injury is responsible for your pain when reading this section.

1. Major Trauma (Acute Injury)

Major trauma refers to injuries that occur suddenly with much FORCE, such as blunt trauma, slips/trips/falls, car accidents and typical strains and sprains from a SINGLE incident.

In such situations the large amount of force causes sudden and significant tearing to the soft tissues. Bleeding will then occur, causing scar-tissue/adhesion to set in. This is all part of the healing process.

2. Micro-Trauma (Repetitive Injury)

ANY activity, when done repeatedly over and over again, may be causing microscopic tearing to your muscles or tendons.

You will not even notice any pain at first with this level of microscopic tearing. The microscopic tear heals with a little bit of scar tissue. As the tearing accumulates with repeated use, we may eventually begin to feel a slight pain or twinge. Eventually, with **Repeated "Micro Trauma,"** the scar-tissue adhesion and grows large enough to cause pain that interferes with daily activities or athletic events.

Repetitive Stress Injuries can occur in any occupation or activity that requires **repetitive action**, involving:

1. Repetitive tasks with small, rapid movements
2. Insufficient rest time between movements
3. Working in awkward or fixed postures for extended periods of time
4. Excessive and forceful movements, used repetitively

Common examples of Repetitive Micro-trauma are computer / mouse work, endurance sports (such as running, bicycling, swimming, triathlons, etc.), tennis, and other short arc-repetitive motion sports. Perhaps the most common and worst form of repetitive stress is that from POOR POSTURE. This is because the muscles in the neck and back are in a chronic state of contraction, seldom getting a chance to rest.

3. NO Trauma (Constant Tension WITHIN, or Constant Pressure ON the muscle tissue)

Ever notice that when you make a tight fist your skin turns a little

pale? This is because the blood is being squeezed out of hand by the **Constant Tension**. The same thing happens when you have muscles in your body that are constantly tight: it squeezes the blood out. This condition is called "Tissue Hypoxia".

A muscle that is tight is a muscle that is having to do work to stay tight, meaning that it is burning energy, and needs oxygen and glucose and other nutrients. But with a decreased blood supply, the muscle begins to starve and chemical damage occurs. This leads to the same process of inflammation, bleeding and scar-tissue adhesion buildup.

"Non-Traumatic" type injuries may also refer to injuries that are chemical or nutritional in nature. For example, smoking can reduce blood supply to joints, leading to arthritis.

Why pain tends to linger or get worse when myofascial adhesions/scar tissue are ignored

Repetitive Stress Injuries occur as a result of **CUMULATIVE TRAUMA** and overuse of soft tissues. Soft tissues that are forced to perform the same job OVER and OVER become **IRRITATED AND INFLAMED**. Over time, the cumulative trauma experienced through the overuse of soft tissues can create more Constant Tension and reduce the blood circulation (**Tissue Hypoxia**) to these tissues. The tissue immediately next to the adhesion gets over-worked, over stressed, has increased friction leading to Repetitive Injury and more microscopic tearing.

The Constant Tension and Repetitive Injury lead to more **Inflammation and Bleeding**, which then leads to even more Adhesion buildup. The body does this because its response to inflammation is to **lay down SCAR TISSUE** in order to **STABILIZE THE AREA**. Once this happens, an ongoing cycle begins that worsens the condition. The longer this cycle persists, the **HARDER** it becomes to avoid permanent soft tissue damage.



The Vicious Adhesion/Cumulative Injury Cycle

When adhesions form anywhere in your muscles, tendons or ligaments, they negatively impact the strength and flexibility of that tissue. Quite often after the adhesion has been there awhile you start to feel the problem 'spread' to other areas or just simply get worse or more debilitating.

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