

# Golf Injuries

## *Resolving Golf Injuries with Active Release Techniques® (ART®)*

Despite being considered a low impact, non-strenuous activity that can be enjoyed by players of all ages and abilities, golf also has a down side – injuries. In fact, each year hundreds of thousands of golfers develop some form of pain or injury that interferes with their ability to play their best, or even worse, keeps them off the course all together. When aches and pains develop many golfers take the approach of ignoring the problem, hoping it will just go away. Unfortunately, this usually leads to more pronounced pain and advanced injury rather than a

resolution of the problem. To make matters worse, these injuries are often slow to respond to traditional types of care.

Fortunately, a new treatment technique known as Active Release Techniques® (ART®) is proving to be a very successful method to combat many common golf related injuries and is helping golfers get back in the game quickly and effectively. But before we talk about how ART® works so effectively, first we need to understand how golf injuries occur in the first place.

### **Why Are Golf Injuries So Common?**

When talking about sports injuries it is important to realize that there are 2 major types of injuries – *acute* and *repetitive*. Acute injuries occur following a single event, such as a fall or hard collision. Fortunately, these types of injuries are rare in golf. On the other hand, repetitive strain injuries are extremely common in golf and make up the vast majority of golf injuries. Repetitive injuries, like the name implies, occur slowly over time as a result of performing the same motions over and over again. As you can see, the golf swing certainly fits into the category of a repetitive motion. For example, over a round of golf or a practice session at the range, a player will take anywhere from 60-100+ swings. This number may be even higher if practice swings are taken into account. Depending on how often a golfer plays or practices, the number of swings can quickly add up into the tens of thousands. This high repetition associated with golf can put a tremendous amount of strain on the body.

The high level of repetition associated with the golf swing is bad enough on its own, but making matters worse is the fact that each swing

requires the production of a tremendous amount of muscle force. To generate and transfer this force through the body and apply it to the golf ball, there needs to be a significant amount of strength, flexibility, and coordination from virtually every muscle and joint in the body. As long as the muscles and joints are working properly the chance of injury is greatly reduced, but as you will see, because of the repetitive nature and high level of muscular forces associated with the golf swing, even minor problems will greatly increase the chances of pain and injury.



## Swing Compensations

When discussing the golf swing it is important to realize that the various body segments are linked together by muscle and joint connections. As a result of the interconnectedness of the body, proper golf mechanics requires not only proper function of each individual muscle and joint, but also requires each area to work together in an integrated manner. This concept of integration is known as the *kinetic chain*. Even if a minor problem such as excessive tightness, weakness, joint restriction, poor muscle balance, or bad posture exists, it will not only cause a problem at that area, but it will also have an impact on the entire kinetic chain as it will cause the body to move in an unwanted, inefficient manner in an effort to compensate for the problematic area. In golf, this alteration in body movement is referred to as a “swing fault” or “swing compensation”.

Swing compensations occur when altered or excessive motion in one area is caused by tight or restricted motion in another area. As a result of the large amounts of flexibility and coordination required for a proper swing, even minor problems will be greatly magnified and result in excessive

strain and eventual injury. For example, a proper swing requires a considerable amount of strength and flexibility from the hips, trunk, and shoulders. If the hip is tight and its full range of motion is limited, it will force the trunk or shoulders to move more than usual to compensate for the loss of motion at the hip. When this happens the mechanics of the golf swing become altered, creating a swing compensation characterized by restricted motion in one area – the hip – and excessive motion in another area – the back or shoulder. This situation will not only compromise the power, accuracy, and consistency of your golf swing, but will also lead to excessive strain and eventual injury to the involved muscles and joints of the hip, trunk, or shoulder.

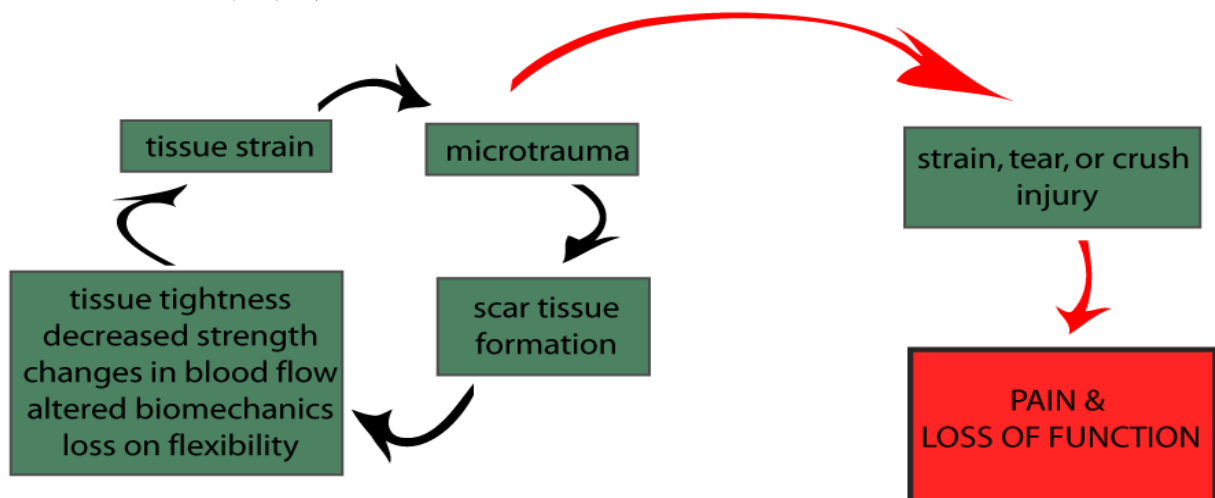
This is just one example of many potential swing compensations commonly seen in the golfer. As a result of the impact swing compensations have on the golf swing and their close association with golf injuries, it is critical that the entire kinetic chain is evaluated to ensure all areas are functioning properly. Failure to identify and correct the true cause of these compensations will not only prolong the injury process, but will also lead to the injury re-occurring over and over again.

## The Injury Process

From the preceding information it should be clear that golf is a highly repetitive activity that subjects the body to a significant amount of force with each successive swing. Over time, these repetitive forces can actually accumulate in the body, leading to muscle, tendon, and joint strain.

This process is greatly magnified when movement restrictions and swing compensations are present. As time goes on, this strain will lead to small scale damage imposed on the body. This damage is referred to as *micro-trauma*, and initially is not painful, but instead may be perceived as a mild ache

the repetitive strain injury cycle



or tightness in the muscles or joints. Although only small, this damage still needs to be repaired. The body responds to tissue injury in a very predictable way – by laying down new tissue to repair the damaged area. With micro-trauma the body repairs the strained tissue by laying down small amounts of scar tissue in and around the injured area. The scar tissue itself is not a problem; in fact, it is a normal and necessary part of healing. The problem occurs as the body is subjected to the same repetitive, high impact forces of the golf swing over and over. This in turn causes the same muscles to become strained and subsequently repaired again and again. Over time this scar tissue will build-up and accumulate into what is called **adhesions**. As these adhesions form they start to affect the normal health and function of the muscles. In fact, they will often lead to **pain, tightness, stiffness, restricted joint motion, and diminished blood flow**.

As scar tissue adhesions accumulate they will place more and more strain on the muscles and joints as they must now stretch and contract against these adhesions with each swing. This places even further strain on the kinetic chain, which in turn leads to more micro-trauma. Essentially, a repetitive injury cycle is set-up



causing continued adhesion formation and progressive movement problems. As the cycle progresses the ability of the muscles to contract properly is affected and the health and stability of the affected regions become compromised. At this point it is not uncommon for the muscles to give way and for a more severe pain to occur. In fact, many golfers come into our office explaining how they have had an injury but have not done anything different that may have caused the pain. When further questioned these golfers almost always describe some mild pain or tightness that has been building over time. As you can see from the explanation of the repetitive injury cycle, these types of injuries build-up over time and the more acute injury is often just the “straw-that-broke-the-camels-back.”

## How Can Golf Injuries Be Fixed?

### The Traditional Approach

In an attempt to treat golf injuries, a variety of treatment methods are used, either on their own, or in combination with other methods. Some of the more common approaches include anti-inflammatory medications, rest, ice, ultrasound (US), muscle stimulation (E-Stim), steroid injections, stretching, exercise, and when all else fails, surgery. Unfortunately, most of these traditional techniques generally require a long period of time before they provide any significant relief, and in many cases provide only temporary relief from symptoms instead of fixing the underlying cause of the problem. This can be a huge problem as golfers often want and need to get back on the course as soon as possible.

The main reason that 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. It is these adhesions that are binding the tissues together, restricting normal movements, and interfering with the normal flexibility and contraction of the muscles, tendons, and ligaments in the kinetic chain.

Passive approaches such as medications, rest, ice, and steroid injections all focus on symptomatic relief and do nothing to address the muscle restrictions and swing compensations. More active approaches such as stretching and exercises are often needed for full correction of the condition and to restore full strength and function of the muscles; however, they themselves 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 from golf injuries.



## **Our Approach: ART® – A Better Solution**

ART® stands for Active Release Techniques®. It is a new and highly successful hands-on treatment method to address problems in the soft tissues of the body, including the muscles, ligaments, fascia, and nerves. ART® treatment is highly successful in dealing with golf injuries because it is specifically designed to locate and treat scar tissue adhesions that accumulate in the muscles and surrounding soft tissues. By locating and treating the soft-tissue adhesions with ART®, it allows the practitioner to, 1) break-up restrictive adhesions, 2) reinstate normal tissue flexibility and movement, and 3) more completely restore flexibility, balance, and stability to the injured area, and to the entire kinetic chain.

You can think of an ART® treatment as a type of active massage. The practitioner will first shorten the muscle, tendon, ligament, or nerve, and then apply a very specific pressure with their hands as you actively stretch and lengthen the tissues. As the tissue lengthens the practitioner is able to assess the texture and tension of the muscle to determine if the tissue is healthy or contains scar tissue that needs further treatment. When scar tissue adhesions are felt the amount and direction of tension can be modified to treat the problematic area. In this sense, each treatment is also an assessment of the health of the area as we are able to feel specifically where the problem is occurring.

An additional benefit of ART® is it allows us to further assess and correct problems not only at the site of pain itself, but also in other areas of the kinetic chain, which are often contributing factors to the problem. This ensures that all the soft tissues that have become dysfunctional and are contributing to the specific injury are addressed, even if they have not yet all developed pain.

One of the best things about ART® is how fast it can get results. In our experience, the majority of golf injuries respond very well to ART® treatments, 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 required to resolve each condition, we usually find a significant improvement can be gained in just 5-8 treatments. These results are the main reason that many elite athletes and professional sports teams have ART® practitioners on staff to keep their athletes healthy and performing their best, and why ART® is an integral part of the Ironman triathlon series.

To book an appointment to see if ART® will be able to help with your golf injury, simply call our office at **(902) 861-2511**. For more information on ART® or on any specific injuries, please send us an email at [frchiropractic@eastlink.ca](mailto:frchiropractic@eastlink.ca).

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