

Fast injury relief

Active Release Techniques (ART)

by Dr. Jenn Turner

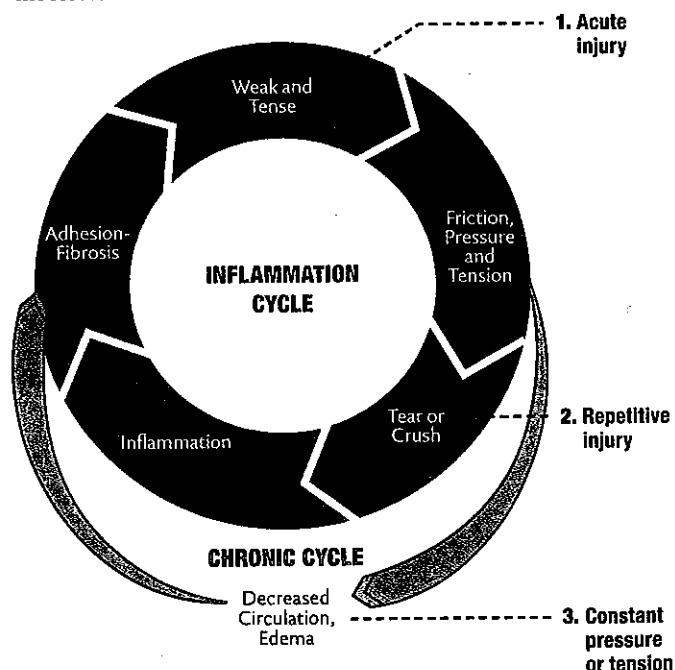
You have seen the tents at many sporting events. You have at least one training partner that raves about it and you have heard of Olympic athletes using it. It is ART, an innovative, soft tissue treatment called Active Release Technique, or ART for short. ART is a patented technique developed in the 1980s by chiropractor and aeronautical engineer Dr. P. Michael Leahy.

Dr. Leahy used his knowledge about engineering and aviation and translated some of those principles to the human body. He discovered that the same mechanisms that govern an airplane exist in the human body. By analyzing motion or activity in the human body he could see how wounds in the muscle affected the surrounding tissues. After much development this unique treatment now plays a significant role in the recovery of both athletic and occupational injuries. Here's how Dr. Leahy explains the theories he uses to describe the injuries triathletes often suffer.

Law of Repetitive Motion

Triathlon requires a lot of repetitive motion. The law of repetitive motion helps to explain the injuries to muscles, ligaments and tendons. The risk of injury is determined by the number of repetitions a muscle performs, the force and intensity of the contraction and how much rest between muscle contractions. The more repetitions a muscle performs, the higher the risk of injury.

For example, during a run an athlete may take 10,000 steps, or repetitions. The force of each repetition is high and the rest between contractions is minimal, which means running has a high risk of injury. You're less likely to get injured swimming or cycling because the forces are lower.



Dr. Jenn Turner doing Active Release Technique on Canada's National Bobsled team members


Cumulative Trauma Disorder (CTD)

Cumulative trauma disorder happens when muscles don't get the rest they need to completely recover. This is the most common cause of injury in triathletes. This disorder can affect muscles, tendons, bones, blood, ligaments and nerves. CTD happens to triathletes in three ways: a repetitive strain injury, an accident like a bike crash or ankle-turn, or improper technique and posture, which causes muscles to work improperly or stay contracted for a long period of time with no rest.

The diagram at left shows that during repetitive activity blood flow to the muscle is decreased. Good blood flow is important to get oxygen and nutrients to the muscle. Without adequate blood flow, the muscles can't recover as well. To compensate, the body creates scar tissue. Scar tissue makes the muscle feel tight and weak and creates tension among other muscles that try to compensate.

ART is a solution to this problem. The ART-trained practitioner (usually a chiropractor, RMT or physiotherapist) breaks up adhesions and scar tissue in the muscle by using active movement. The specific movements relating to the injured body part (e.g. muscle, tendon, ligament) differentiates ART from other forms of soft tissue therapy.

This active lengthening motion, coupled with specific thumb pressure or tension, can break up, or release, the adhesions in the tissues. It often takes only a few treatments and allows the tissues to slide over each other and regain proper function. The success of the treatment also depends on doing rehabilitation exercises, too, as many injuries are caused by a muscle imbalance or dysfunction that needs to be addressed.

Preliminary studies have shown ART to be more effective than conventional treatments for some soft tissue injuries. Many medical doctors recommend this treatment and many professional and amateur athletes strongly believe in Active Release. For more information on Active Release Techniques check out the official website at www.activerelease.com. 

Dr. Jenn Turner is the chiropractor for the Symmetrics Pro Cycling Team and has successfully used ART on many of the team members. She is completing her residency in Chiropractic Sports Sciences and is a competitive triathlete. She practices at the Moveo Sport and Rehabilitation Centre in North Vancouver.

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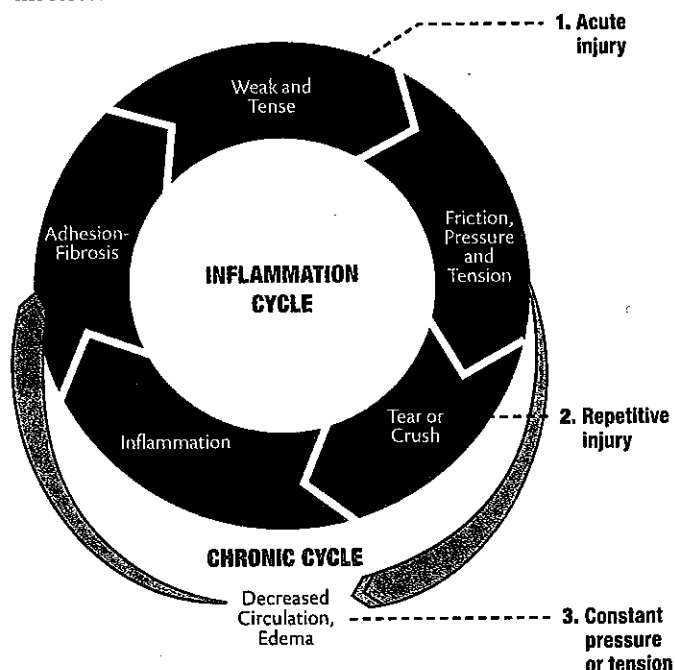
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