Newsletter

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New treatment gets athletes (and others) moving again

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When drugs, physical therapy and high-tech electronics fail, the next step for most injuries is surgery.

But athletes need a better way to deal with injury, without worrying about a 10-week post-surgery recovery. Athletes need a non-invasive treatment and it needs to be more than just a treatment; it needs to get athletes back in the gym training at 100% as soon as possible.

Active Release Techniques (ART) is a collection of different 'hands-on' soft tissue techniques that treat alterations in tissue texture and tension.

"Most people think of a muscle that's loose as being weak, but that isn't true," says Dr. Michael Leahy, the person responsible for the development of ART. There's a desirable range of tension in the muscles and soft tissues. If a muscle stays tight for any length of time it weakens. This weakness can affect performance and lead to injury. What we do is find the tissue that's injured and physically work it back to the texture, tension and movement it should have."

ART is effective. For example, carpal tunnel syndrome, an increasingly common workplace injury is similar to the repetitive motion injuries that inflict many athletes. Injuries such as rotator-cuff tendonitis and tennis elbow are problems that many health-care professionals believe can be resolved only by surgery. But ART boasts a 95% success rate with many of these so called "incurable" injuries.

"Even if an individual has had a problem for years, we can usually resolve it in about six visits," claims Dr. Leahy.

Unlike many conventional therapies, ART doesn't require extended rest before you start noticing the result.

Many athletes are treated right before their events. In a post-Olympic Games interview Donovan Bailey, 100 metre gold medalist, said Leahy's technique contributed to his victory. ART should not be confused with standard massage, in fact it is a soft-tissue treatment.

Sports injuries can come from a variety of sources; however, all these sources can lead to microtrauma, that can get worse over time. Because you don't recognize that the injury is there, you re-injure yourself frequently. This repeated micro-trauma can eventually have profound effect on the specific action of the joint and the surrounding tissues.

The effects of the micro-trauma include the micro-tearing of the muscle, the sheath around the muscle and the adjacent connective tissue, as well as stress to the tendon and its bony attachments. The microtearing of the muscle tissue leads to microscopic bleeding, all of which affects the entire area around the injury, contributing to what is commonly known as inflammation.

The body responds to this inflammation by forming fibrous adhesions –scar tissue in the muscle, between the sheaths of adjacent muscle groups and between the fascia- a sheet of tissue covering the muscle and the muscle sheaths. These fibrous adhesions limit the ease and range of motion of muscles and joints and can affect the muscles' function. Once the normal biomechanics of the joint are altered, further inflammation can occur and the pattern becomes a vicious cycle of long-term wear and tear.

This fibrous adhesion pattern can be seen in people who do certain exercises and complain of the same pain consistently in the same spot. This doesn't happen by chance. Taking time off will decrease

inflammation but it will not decrease the scar tissue.

As soon as you start exercising again, the fibrous adhesion will increase the inflammation and the resulting pain will limit your activity. You have to identify all the possible fibrous adhesions, then perform some soft tissue therapy to break all these adhesions. This will restore normal function.

ART is aimed at manually breaking up the scar tissue that can entrap muscles, tendons, ligaments and even nerves. After the adhesions are removed, a rehabilitation program should be used to strengthen the muscles since certain muscles will not have been properly strengthened due to altered biomechanics.

The problem with stretching is that it's not specific; you may end up breaking apart good connective tissue because the scar is as strong or stronger than normal tissue. ART may be uncomfortable, but Leahy believes "the only risk with Active Release is having people treat you who don't know what they're doing-they could do some damage."

Dr. Leahy suggests that if someone claims to perform ART ask to see his or her certificate. He also suggests that it takes about two years of practice to master the technique. Although currently there aren't many people who can perform ART the future looks bright. Formal research on the procedure have been started at the University of California at San Diego.

So if you're suffering from a shoulder injury, carpal tunnel syndrome or any deep muscle injury and you thought surgery was the only way to get relief, think again. ART may be a better alternative.