

MESSAGE FOR ROTATOR CUFF INJURIES

By Dr. Leo B. Stouder

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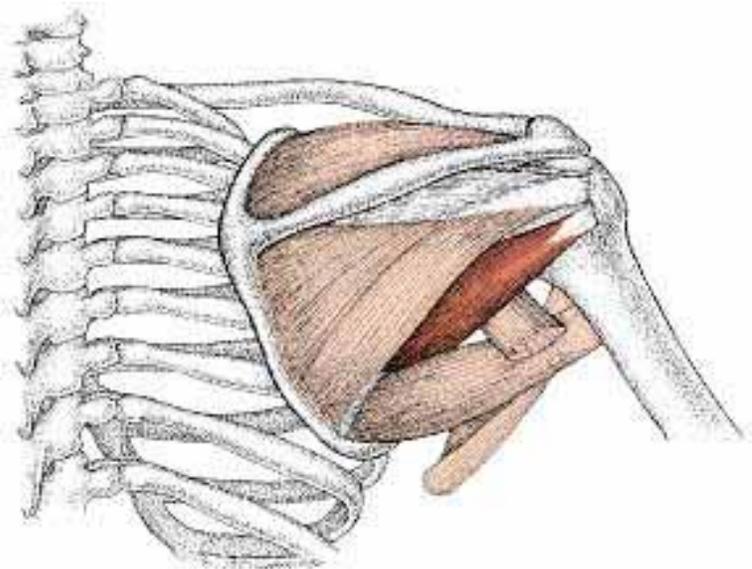
Rotator cuff injuries are fairly common in the United States and can occur from a number of things, including poor posture, reaching up to place items on a shelf above your head or even throwing a baseball.

Knowing how to help clients who come in with these injuries is key.

Everyday Examples

Mary is a 50-year-old moderately active woman. After complaining of shoulder pain for several weeks, she saw her physician. He told Mary she has **Rotator Cuff Syndrome (RCS)**, a painful condition that causes disturbed sleep, limited range of movement and pain even without movement. Ted, too, was diagnosed with RCS by his doctor. However, Ted is a professional athlete in his mid-20s. Though the cause of the pain is different for each of these cases, both are suffering from the effects of rotator cuff syndrome (RCS). This painful condition can cause limited range of movement and pain without movement, and even sleep disturbances.

Since the shoulder is one of the most important joints in the body, its malfunction can alter the quality of life dramatically. Consider all that your shoulder does for you—writing, reading, eating and even proper hygiene acts like combing your hair or brushing your teeth. All of these functions can be severely compromised with a shoulder malfunction such as the RCS rotator cuff syndrome.



What Goes Wrong?

RCS means a few muscles have quit working together. The shoulder is best likened to a sports team where all the members of the team need to work together. If any one member is having an off day and is not pulling his weight, the other team members will need to work harder, and they will eventually become fatigued. The team of muscles that make up the shoulder work the same way. If one muscle is injured in the shoulder, then the other muscles will need to make up for that deficiency. With an excessive workload, the muscles that are overworked may fatigue and become injured themselves. One muscle dysfunction causes another and another.

Above: Shoulder with the posterior rotator cuff muscles

The best prevention for rotator cuff syndrome is to never have the initial *one* muscle injury. But trying to prevent rotator cuff syndrome is difficult because the signs of injury can be subtle. Who hasn't had some

shoulder soreness after activity? Usually, this isn't the start of rotator cuff syndrome, but sometimes it can be.

Another problem with detecting rotator cuff syndrome is the fact that the muscles of the shoulder tend to compensate—particularly in the athlete—and the problem may go unnoticed or may be passed off as “just a sore shoulder.” If the initial injury is ignored, the shoulder will get worse, eventually involving more and more muscles.

The primary muscle injury that is involved in rotator cuff syndrome is muscle imbalance that can cause a tear of the tendon of the muscle. In Mary's case, the tear of her tendon was due to a process called degeneration. As Mary's tendon aged it got less and less blood supply until it finally just gave up from lack of nutrients and oxygen. Mary was surprised by the tear in the muscle tendon. As she told her massage therapist, “I didn't do anything.” In fact, this is the problem—RCS caused by inactivity is often the underlying cause of this condition in the 50 and older population.

Ted's muscle tendon tear is due to a different reason than Mary's. His problem is from trauma. Ted felt his shoulder becoming more sore after he threw a number of pitches. He just figured he didn't warm up properly. As a result, he continued to throw. This is a common occurrence with athletes; the initial muscle imbalance was ignored in Ted's case, and it progressed. Now he has a tear in his rotator cuff. He unable to raise his arm above his head, and he feels like his future in sports is over.

The Involved Muscles

Oftentimes, weak muscles are strengthened when spastic muscles relax. The muscles may become weak from fatigue because the antagonist muscle that is spastic is pulling it. This lets you see the true muscle weakness causing muscle spasm. If one muscle is weak, the antagonist muscle may become spastic in response to that weakness.

The first thing that you can do to evaluate the problem is to palpate the tendons of the rotator cuff. Placing finger pressure on the spastic tendons is a good start in the analysis of the problem.

The four muscles of the rotator cuff are the **supraspinatus, infraspinatus, teres minor and subscapularis**. Initially, the most important muscle is the Supraspinatus. Problems with this muscle can often cause worse trouble with the rotator cuff muscle. Often, the Supraspinatus is the muscle injured first, then the other muscles follow. With proper deep pressure on this tendon, you can come away from the analysis with a good idea of the client's injury.

The second thing that needs to be addressed is if the muscle is weak or spasm. Doctors can test specific muscles to determine the real problem in the shoulder. One muscle test that can be used is called the drop arm test. If the client cannot hold a weight in his hand it is considered a positive test for weakness. Deep massage to the muscle belly should provide drastic results to the muscle strength.

How Massage Therapy Can Help

Mary and Ted will recover with proper therapy, which can be summarized with one word: balance. The best therapy for a RCS is to balance the muscles so that each will be able to do its job and heal the



Above: A physician performs the Supraspinatus muscle test.

tendons. Tendons with proper stress have a better chance of rehabilitating and healing.

Massage therapy is especially suited to rehabilitate RCS. The underlying muscle imbalance can be helped by specific soft tissue massage. The key to proper care of the shoulder muscles that involve RCS is to relieve the muscle spasm and strengthen the weak muscles. Kinesiology muscle testing can determine which muscles are weak, which ones are too tight, and which ones are properly functioning. Once the imbalance is known, the therapy approach is straightforward—relax the spastic muscles and strengthen the weak ones. It'll go a long way to help relieve the RCS pain your clients are experiencing.

Dr. Leo B. Stouder, D.C. (aka, Dr. Anatomy) teaches Applied Anatomy Seminars Send comments to: DrAnatomy@Bellsouth.net or visit his Web site at www.AnatomySeminars.com.

DID YOU KNOW?

According to the MayoClinic.com, people suffering from rotator cuff syndrome may experience the following:

- ✓ Pain and tenderness in your shoulder, especially when reaching overhead or when sleeping on the affected side;
- ✓ Shoulder weakness;
- ✓ Loss of shoulder movement;
- ✓ Desire to keep your shoulder inactive.