DO YOU HAVE SOME OF THE SIGNS AND SYMPTOMS OF AN INJURED ROTATOR CUFF?

Problems in the rotator cuff can manifest with a variety of symptoms. Remember, all pain in the shoulder has something to do with the rotator cuff, either directly or indirectly. Here’s a partial list of the most common signs and symptoms:

- Limited range of motion in the arm/shoulder.

- Pain in the upper arm, where the deltoid muscle is, especially when the arm is lifted away from the side in abduction. It may feel like the pain is deep in the shoulder joint. This pain is often from trigger points in the rotator cuff muscles.

- Pain at rest or during movement.

- Pain during movements like those involved in getting dressed, brushing your hair, reaching back to a night-stand, fastening a seat belt, putting on a coat and many more.

- Weakness in the shoulder.

- A clicking or popping sound when moving the arm.

- A painful arc through part of the range of motion involved in raising your arm above your head. This means you can move your arm without pain up to a certain point, then it hurts for a bit, then the pain goes away. This is called a painful arc.

Do you recognize any of your symptoms? If so, the good news is that your pain can be completely alleviated by this self-care program. Read Frank K.’s experience with his shoulder injury:

Old jocks like me hate to see the doctor. They rarely have a simple and non-invasive suggestion when I whine about getting old and “My knee’s killing me!” or “My shoulder gets this pain, see doc, I once was a great basketball center.” Sure, the Glory Days! Now it’s a magic pill or two and/or scheduling what I’m told is the “inevitable” surgery date. My choices are dire: Either I’m laden with pills for this and that or they want to cut me up, chop it off, or stick in some mechanical doodad. So went the too, too familiar orthopedic visit when I asked if there were any new techniques or options for healing my aching shoulder. I’m a layman, so I didn’t know a rotator cuff from my tibia tuberosity, all that I knew is that I had lost full range of motion, as was said and jotted down in my file. I could ice it, heat it, numb it out, x-ray it, MRI it...but I knew in the doc’s mind that it would just be more pills or another surgery. Or as my doc actually said, “It’s age, learn to live with it.” Which I did for five years!

Then while having a wonderful massage, Peggy says that she has a way to ease my pain. From a massage therapist? But then she starts working on muscles and tendons and pressing on this and that, working parts of me no doctor’s every
said was a pathway to healing. Sure, she’s giving me a Latin name for this and that, and honestly I’m getting a bit unsettled with this very unusual approach but when she asks me to raise my arm and move it this way and then that, believe me, within twenty minutes she had me thinking that the ole hook shot was back. Months later, I am still walking around with full range of movement, no pills, no schedule for surgery, and a lot of trust in what a massage therapist can do for my rotator cuff injury. Of course I did my “homework” – all the suggestions in her Self-Care booklet. Listening to Peggy and/or working with a massage therapist whom she has trained is, quite simply, a slam-dunk!

I highly recommend working with a knowledgeable massage therapist. I’d be happy to recommend one in your area that has trained with me. Go to www.rotatorcuffrelief.net to find one.

Ninety percent of all rotator cuff injuries arise from **poor posture and incorrect shoulder mechanics** which in turn cause:

- Strength imbalance between the muscles that roll the shoulder forward and back (internal and external rotators). The internal rotators of the shoulder joint (humerus bone) outnumber the external rotators. What do people do when they go to the gym? Strength train the internal rotators and ignore the external rotators! I’ll cover this in more depth in the section entitled “A Lesson in Shoulder Mechanics”.

- Inflamed and possibly fibrotic rotator cuff muscles and tendons and trigger points in the muscles.

- Weak and overstretched scapulae retractors (the muscles that pull the shoulder blades together - rhomboids and middle traps).
Rotator Cuff Muscles

Front view of the rotator cuff muscles

Back view of the rotator cuff muscles
A vitally important concept in this booklet is that of referred pain from trigger points. A trigger point is a hyper-irritable point in a muscle that refers or radiates pain to another part of the body. Let’s look at the trigger point referral patterns for the rotator cuff muscles.

Trigger point referral pattern for supraspinatus: Muscle #1

Trigger point referral pattern for infraspinatus/teres minor: Muscles #2 and #3

Trigger point referral pattern for subscapularis: Muscle #4

DO YOU RECOGNIZE ANY OF YOUR PAIN PATTERNS?
As you can see, these trigger points are responsible for much of the shoulder pain people suffer. My clients have been amazed when I show them these trigger point patterns. If they've seen a doctor, they usually exclaim, “How come my doctor never showed me this?” I gently explain that many doctors are not educated about trigger points. Ironically, two pioneers in trigger point research were Drs. Janet Travell and David Simons, both MD's. Dr. Janet Travell was the White House physician during the Kennedy and Johnson administrations. She helped John F. Kennedy so much with his back pain from injuries he sustained during World War II with procaine injections into trigger points that he made her the White House physician.

Most of the time these trigger points are caused by poor posture and incorrect shoulder mechanics. The trigger point can feel like a small pea buried deep in the muscle. These hyper-irritable points place a constant strain on the muscle, restricting circulation and producing noxious chemical by-products. The resulting deprivation of oxygen and nutrients can perpetuate trigger points for years. Conventional pain treatment often fails because it focuses on the pain and not on the cause of the pain.

**ROTATOR CUFF INJURIES CAN INCLUDE ALL OR SOME OF THE FOLLOWING:**

- Tears in muscles and/or tendons.
- Tendonitis or tendonosis (breakdown of collagen fibers) in tendons.
- Trigger points in muscles.
- Adaptive shortening of internal rotators of the shoulder joint (humerus). This shortening of the internal rotators pulls the head of the humerus (the big ball on top of your upper arm) forward, creating a painful over-stretched state of muscles # 3 and 4 (infraspinatus and teres minor).
- Impingement of bursa and tendons. (See page 19)
- Formation of scar tissue (adhesions) that decrease the muscle’s ability to contract and stretch. Scar tissue often binds together damaged and undamaged tissue, resulting in adhesions, causing pain, re-injury, and restricted range of movement. Scar tissue primarily forms in ligaments, muscles, tendons, fascia, and joint capsules.
- Injury such as a fall onto the shoulder.
- Bicipital tendonitis (inflammation of the long head of the biceps) which sometimes accompanies rotator cuff injuries.
All shoulder pain involves the rotator cuff to some degree. It is the commander and chief of the shoulder complex. Let’s start by understanding the rotator cuff.

The rotator cuff is a combination of four muscles:

- **Supraspinatus (muscle #1)**
- **Infraspinatus (muscle #2)**
- **Teres minor (muscle #3)**
- **Subscapularis (muscle #4)**

Together they are commonly known as the “SITS” muscles. They work together to stabilize the head of the humerus during all shoulder movements (essentially most upper body movements). “SITS” keeps the humerus stable and centered in the shoulder joint. Think of them as guy wires pulling on a tent pole.

- **Muscle #1** (the supraspinatus) pulls the head of the humerus into the shoulder joint from above.
- **Muscle #2** (the infraspinatus) pulls it in from the rear.
- **Muscle #3** (the teres minor) pulls it in from bottom/rear.
- **Muscle #4** (the subscapularis) pulls it in from the bottom/front *(see graphic above).*

Some sources define the cuff as the tendons of these four muscles, but we will use a broader definition that includes the muscles.

A healthy rotator cuff stabilizes the shoulder joint so we can swim, dance, play tennis, throw a ball, play golf etc. An injured cuff compromises the function of all the muscles surrounding the joint.
Another way the rotator cuff works is as a decelerator, or braking system to slow things down. If you throw a ball or swing a tennis racket, first you externally rotate your shoulder as a wind up, then forcefully internally rotate as you throw or hit the ball as shown in the picture to your right. What keeps your arm from flying off your body? The rotator cuff, specifically the infraspinatus and teres minor. These two small powerhouses are the only external rotators of the shoulder joint. They have to work very hard to counterbalance the powerful internal rotators which outnumber them.

In addition to the stabilizing and deceleration functions, the rotator cuff has another big job. It performs movements:

1. Subscapularis: internal rotation
2. Infraspinatus and teres minor: external rotation of the humerus
3. Supraspinatus: abduction of the humerus

**In summary, the rotator cuff:**
1. Stabilizes the head of the humerus during all shoulder joint movements.
2. Decelerates the arm when you throw something or swing a golf club, etc.
3. Provides movement: internal/external rotation and abduction of the humerus.

**These are busy muscles that are constantly multitasking!**