

# Informational Guide to Rotator Cuff Tears

## *Introduction*

Rotator cuff tear is a common cause of pain and disability in the adult population. The rotator cuff is made up of four muscles and their tendons. These combine to form a "cuff" over the upper end of the arm (head of the humerus). The four muscles - supraspinatus, infraspinatus, subscapularis, and teres minor - originate from the "wing bone"(scapula), and together form a single tendon unit. This inserts on the greater tuberosity of the humerus (a bony prominence at the top of the arm bone). The rotator cuff helps to lift and rotate the arm and to stabilize the ball of the shoulder within the joint. Most tears occur in the supraspinatus but other parts of the tendon may be involved.

Some of the signs of a rotator cuff tear include:

- \* Atrophy or thinning of the muscles about the shoulder
- \* Pain when you lift your arm
- \* Pain when you lower your arm from a fully raised position
- \* Weakness when you lift or rotate your arm
- \* Crepitus or crackling sensation when you move your shoulder in certain positions

## *Symptoms*

Symptoms of a rotator cuff tear may develop suddenly or have a more gradual onset. Acute pain usually follows trauma such as a lifting injury or a fall on the affected arm. More commonly the onset is gradual and may be caused by repetitive overhead activity or by wear and degeneration of the tendon. You may feel pain in the front of your shoulder that travels down the side of your arm. At first the pain may be mild and only present with overhead activities such as reaching or lifting. Over time the pain may become noticeable at rest or with no activity at all. There may be pain when you lie on the affected side and at night. Other symptoms may include stiffness and loss of motion. You may have difficulty using your arm to reach overhead to comb your hair or difficulty placing your arm behind your back to fasten a button.

## *Diagnosis*

Diagnosis of a rotator cuff tear is based on your symptoms, a physical examination which includes assessing the range of motion and strength of your shoulder, and X-rays and imaging studies such as MRI (magnetic resonance imaging).

## *Treatment*

Once a diagnosis of rotator cuff tear has been made, your orthopaedic surgeon will recommend the most effective treatment. In many instances, non-surgical treatment can provide pain relief and can improve the function of your shoulder.

Treatment options may include:

- \* Rest and limited overhead activity
- \* Anti-inflammatory medication
- \* Steroid injection
- \* Physical therapy

It may take several weeks or months to restore the strength and mobility to your shoulder.

### **Treatment Options: Surgical**

Surgery may also be considered if the tear is recent and painful, if it is the dominant arm of an active individual or if you need maximum strength in your arm for overhead work or sports. The type of surgery performed depends on the size, shape and location of the tear. A partial tear may require only a trimming or smoothing procedure called a "debridement." A complete tear within the substance of the tendon is repaired by suturing the two sides of the tendon. If the tendon is torn from its insertion on the greater tuberosity of the humerus, it can be repaired directly to bone. Many surgical repairs can be done on an outpatient basis.

### *Rehabilitation*

Physical therapy focuses on re-educating core scapular muscles before focusing on the rotator cuff muscles. The scapular muscles support the rotator cuff and re-education of the scapula almost always results in improved movement. An active movement progression is implemented to gradually increase strength and function to the shoulder muscles. This progression begins with sliding a towel across and table and ends with lifting weights for strength. The rehab is complete when the patient has full range of motion and is satisfied with their functional ability.

### *More Information...*

For more information please contact any of our three clinics in Roseville, Spring Lake Park, or Blaine where a knowledgeable therapist will be happy to assist you with your recovery needs.