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Patient Information Sheet: Rotator Cuff Tear/ Impingement

Dedham Office: 617-264-1100 Waltham Office: 781-890-2133

The rotator cuff is made up of four muscles in your shoulder. These four muscles (subscapularis, supraspinatus, infraspinatus and teres minor) connect your Humerus to your shoulder blade and act to stabilize the ball of your shoulder within the shoulder socket. Injury to the rotator cuff may consist of tendonitis, acute tearing or chronic tearing.

Rotator Cuff Tendonitis/ Partial rotator cuff tears:

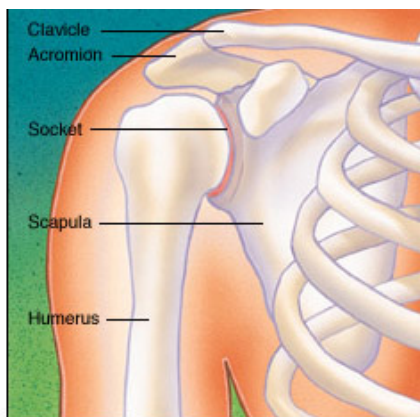
Rotator cuff tendonitis or partial tears are often caused by shoulder overuse or injury. Often overhead activities, overuse or acute injury will cause inflammation and

strain of the rotator cuff musculature. This may occur from poor posture or activities such as loading equipment onto the top of a car or repetitive baseball throwing. In addition, trauma to the shoulder such as a fall may cause inflammation or partial tearing of the rotator cuff. Often shoulder "impingement" is a cause or worsening factor of rotator cuff tendonitis. This occurs when the acromion (a portion of a shoulder bone) impinges upon the rotator cuff. The undersurface of the acromion acts like sandpaper and may progress rotator cuff irritation or limit the tissue to heal. This may in time progress to a full rotator cuff tear.

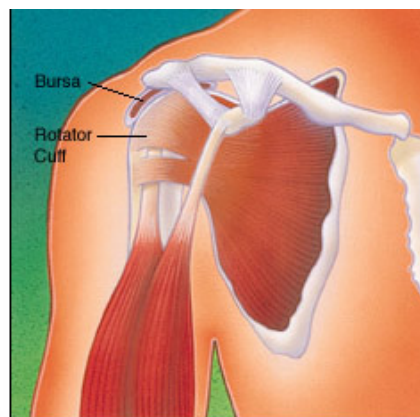
Symptoms of rotator cuff pathology include pain located primarily in the top and front of the shoulder joint. The pain often radiates to the deltoid region. This pain will often worsen with overhead activity and during sleep. It is also common to experience weakness with shoulder activity.

Rotator tendonitis is often diagnosed by physical examination. X-ray and MRI may be used as adjuncts to diagnosis. The presence of a spur or bump on the undersurface of the acromion may be detected on x-ray. Often an MRI will be used to examine the condition of the rotator cuff and assess whether the rotator cuff is torn.

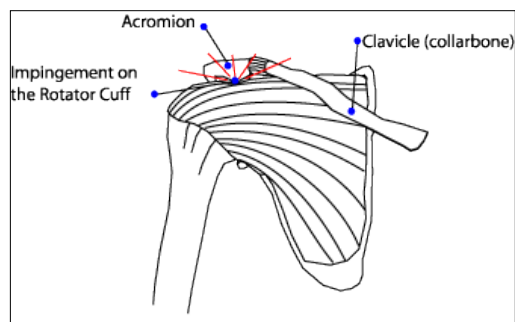
Often rotator cuff tendon inflammation can be treated without surgical intervention. First line treatment consists of Anti-inflammatories such as Ibuprofen, ice and rest. A cortisone injection may be placed into the shoulder region. Cortisone is a strong anti-inflammatory medication that works to decrease



Normal Shoulder Joint



Normal Shoulder Muscles and Tendons



inflammation and pain within the rotator cuff and surrounding bursa tissue. Physical therapy may also be utilized for rotator cuff strengthening and pain reduction

Surgical decompression is an option for patients who do not respond to the above treatments or have a hooked or impinging acromion. The surgery is conducted with arthroscopic equipment. This means that we will use a small camera and small equipment through little incisions to remove some bone on the undersurface of the acromion. This opens up space for the rotator cuff to heal and properly function.

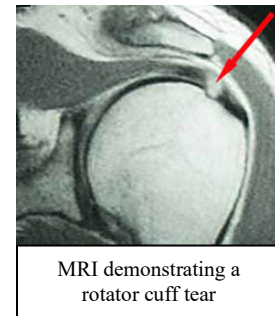
Rotator Cuff Tear:

A rotator cuff tear occurs when one or more of the rotator cuff muscles detaches from its attachment on the humerus. Rotator cuff tears may be acute from injury or chronic from years of



impingement or tendonitis. Acute tears may occur from a fall on to an outstretched arm or during a quick movement such as a sudden thrust of a kayak paddle. Often this will be accompanied by extreme shoulder pain that will often linger after the initial insult. Pain will limit shoulder movement and often strength will be decreased. Chronic tears usually occur in patients over the age of 40 and in the dominant shoulder. Patients often report gradually worsening pain and decreased arm mobility. The pain often wakes the patient up from a sleep.

In addition to physical examination an MRI is utilized to detect a rotator cuff tear. The MRI will often reveal the torn cuff and demonstrate the extent of the tear. The tear may be partially torn or completely torn. The size of the tear may vary from small to massive and this may also be seen on MRI.



Surgical repair is the treatment of choice for symptomatic and disabling rotator cuff tears. The rotator cuff will not heal back to bone without surgical intervention. An arthroscopic rotator cuff repair with sub-acromial decompression is often performed. This means that a small camera and small equipment will be used through tiny incisions to stitch the rotator cuff back to the attachment on the humerus. Anchors or screws are placed in the bone. These anchors have built in sutures that are stitched through the rotator cuff. The stitch is then fixed thus returning the rotator cuff to the original position on the bone. At the same time, we will often decompress or open up the space around the rotator cuff to permit healing.

Biceps Tendon Tear:

The biceps tendon can be a significant contributor to shoulder pain. The biceps has two shoulder attachments. The long head of the biceps inserts in the joint of the shoulder at the glenoid. This portion of the can be injured through trauma or with chronic degeneration. Typical pain from a biceps tear is in the front of the shoulder. Biceps pathology can be treated with simple debridement for small tears or tenodesis vs tenotomy. A tenodesis involves removing the biceps from its current attachment and reattaching it in a new less tensioned position thus reliving pain. A biceps tenotomy simply involves cutting the tendon thus reliving pain but may lead to cosmetic change of the biceps.

Acromioclavicular Joint:

The AC joint is a union between the clavicle and the acromion. Often this joint can develop osteoarthritis and become a source of pain. The joint may develop spurs that can encroach on the rotator cuff. This joint can become a pain generator and may be treated with an arthroscopic resection. By

removing the joint, the rotator cuff can be freed of excess tension thus decreasing pain. Often the when the AC joint develops osteoarthritis, a bump on the top of the shoulder can be seen and felt. Often when treating the condition by resecting the joint, the bump you see will remain. Leaving the bump will not have any effect on function or the improvement you will see after the arthroscopic surgery.

Pre-Surgery:

- Anti-inflammatories such as ibuprofen or aspirin must be stopped 7 days prior to surgery. Utilize ice, elevation and Tylenol as per box dosage recommendation to control pain and swelling during this period
- On the night before surgery, If at:
 - Boston Outpatient Surgical suites:
 - No food or liquids after 12 am
 - New England Baptist Hospital:
 - No food or liquids after 12 am
- On the morning of surgery, you may take your daily pills with a sip of water
- Your surgery time will be confirmed the day before the surgery by either:
 - Boston Outpatient Surgical Suites (BOSS): 781-895-4901
 - New England Baptist Hospital (NEBH): 617-754-5800
 - The original time may be adjusted based on patient needs and equipment availability
- Patients should bring their “Patient Passport Folder” MRI and X-rays to the surgery
- If your surgery is done at our Waltham facility (BOSS), the person who is accompanying you is welcome to a free one-day gym pass

Surgery:

The length of an arthroscopic rotator cuff repair may take up to 2 hours depending on the extent of the tear. An arthroscopic sub-acromial decompression will often last one hour. Your nurse will bring you into the pre-op area where you will have an IV placed and meet with your anesthesiologist. General anesthesia is utilized to assure a comfortable surgery. This means that you will be “asleep” and completely unaware of the surgery until you wake up in the recovery area. Most patients will have a small tube placed in their windpipe; formal intubation may not be required. Like any surgical procedure, there are risks. These risks are extremely rare and consist of nerve injury, infection and shoulder stiffness, and re-tear of the rotator cuff. It is important to note that you may experience post-op clicking of the shoulder during joint motion. This is a result of scar tissue formation and is common after shoulder surgery and may be permanent. A nerve block may be used to aid in lessening pain during the first hours of your recovery. See nerve block education sheet in this packet for specifics.

Post-Surgery:

After the surgery is completed, you will awaken in the operating room and be moved to the recovery area. Most patients generally recover smoothly and have minimal pain due to local pain medication that is used at the completion of the surgery. Family members and guests are permitted to visit in the recovery area once the patient is fully awake and feeling comfortable; this may take up to 2 hours after the surgery is completed.

- A pain medication prescription will be provided prior to discharge. You may take the prescribed medication as directed. You should expect to experience minimal to moderate shoulder discomfort for several days and even weeks following the surgery. Patients often only need prescription narcotics for a few days following surgery and then can switch to over-the-counter medications Tylenol or Ibuprofen. Ice should be applied to the shoulder up to three times a day for 20 minutes until swelling subsides
- At the completion of surgery, you will have a sling placed on your arm. If a rotator cuff repair was performed you will be required to wear the sling at all times with the exception of when

- performing exercises, showering and dressing. If only a sub-acromial decompression was performed (no rotator cuff repair) then the sling may be used for comfort only
- If the bandage is draining, reinforce it with additional dressings for the first 48 hours. After 48 hours remove the bandage and place band aids over the incision sites. Showering is acceptable at this time. Do not scrub the shoulder.
 - There is an exercise sheet at the end of this packet. Conduct exercises three times daily until further directions are provided.
 - If only a sub-acromial decompression was performed then you may start PT prior to the first post-op apt.
 - Take one 325 mg (full strength) aspirin daily for 21 days (unless otherwise instructed) to prevent blood clots.
 - Follow up with Dr. McKeon or Jason Rand PA-C within 2 weeks from the date of surgery.
 - Eat a regular diet as tolerated and please drink plenty of fluids.
 - You are unable to drive a car as long as you need to utilize a sling. For patients who had only a decompression driving may start when they are comfortable, often 3-7 days after surgery. Patients who undergo rotator cuff repair will utilize a sling for a longer duration. Only drive when the sling is discontinued, you are off narcotic pain medication and you are confident in your ability to drive.
 - Please call the office if you experience a temperature >102 degrees, excessive swelling, pain or redness around the incision sites.
 - Plan at least a week away from work or school. Utilize this time to decrease swelling and participate in your home exercise program. You may be able to resume work (depending on type of work and setting; very variable) once the pain and swelling resolves.
 - The above are guidelines and only intended as generalities.



Rehabilitation for patients who underwent a subacromial decompression and rotator cuff repair will vary depending on extent of surgery and pathology. The following are only general recommendations, please see your individual prescription for specifics.

Post-op Rehabilitation Protocol – **Subacromial Decompression**

Phase 1 (Weeks 0-3):

Goals: Minimize effusion, decrease shoulder pain, Full shoulder range of motion, discontinue sling when comfortable

Treatment plan:

- 1) Active assisted ROM, and passive stretching
- 2) Swelling control with ice, modalities
- 3) Scapulothoracic strengthening
- 4) Active elbow, wrist and hand exercises

Phase 2 (Weeks 3-6):

Goals: Full shoulder ROM, progressive strengthening, sport or work specific training

Treatment plan:

- 1) Continue with swelling and pain control
- 2) Rotator cuff strengthening program with TheraBand, progress to light weights
- 3) Rotator cuff/ shoulder PRE
- 4) Aerobic / sport or work specific training



Rehabilitation for patients who underwent a subacromial decompression and rotator cuff repair will vary depending on extent of surgery and pathology, see prescription for specifics. The following are only general recommendations

Post-op Rehabilitation Protocol – **Rotator Cuff Repair**

Phase 1 (Weeks 0-2):

Goals: Minimize effusion, decrease shoulder pain, utilize sling, and participate in home exercise program

Treatment plan:

- 1) Swelling control with ice
- 2) Sling use until the first post-op apt. then likely as needed
- 3) Elbow and Wrist motion
- 4) Posture work – scapulothoracic strengthening
- 5) Modalities, soft tissue work

Phase 2 (Weeks 2-5):

Goals: Initiate formal physical therapy, Full passive ROM, remove sling

Treatment plan:

- 1) swelling and pain control
- 2) Progressive Passive to active assisted range of motion activities
- 3) Proprioception work
- 4) Scapulothoracic range of motion and strengthening/ posture work
- 5) Wrist and elbow range of motion and strengthening

Phase 3 (Weeks 8-12):

Goals: Full active range of motion, rotator cuff and shoulder PRE, aerobic training,

Treatment plan:

- 1) swelling and pain control
- 2) Progressive active range of motion strengthening exercises
- 3) Scapulothoracic strengthening exercises
- 4) Direct Rotator cuff loading work (This is highly dependent on type of tear and repair)

Phase 4 (Weeks 12-24):

Goals: Home exercise program, rotator cuff and shoulder PRE, aerobic training



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Nerve Block Education Sheet

Prior to your surgery you will be given the option to have a nerve block as part of your post-operative pain management plan. This information should be used as general education; your anesthesiologist will review specifics prior to your surgery

What is a Nerve Block?

A nerve block is the injection of numbing medication (local anesthetic) near specific nerves to decrease your pain during and after surgery. Nerve blocks are completed before your surgery at the bedside in the preoperative area of the surgical center or New England Baptist Hospital.

Why should I have a nerve block?

A nerve block decreases your pain during and after surgery. Because you have less pain, you may require less oral pain medication during the early post-operative period.

Is a nerve block safe?

Like general anesthesia, nerve blocks involve some minor risks. The risk of infection is very low as the procedure is done in a sterile manner. There is an extremely low risk (<0.1%) of injury to nerves, and this is usually temporary.

Will having a nerve block hurt?

Nerve blocks involve placing a needle smaller than an IV near the nerves that supply the part of your body being operated on. You will feel a little pinch followed by some minor pressure. Sedation can be used to decrease the discomfort of the procedure if needed.

How long will the nerve block last?

The duration of a nerve block can vary significantly. On average pain relief/ numbness of the extremity will last between 8 - 12 hours.

How is the block done?

The nerve block is performed by your anesthesiologist. The nerve block is usually performed under ultrasound guidance.

How long will the block take?

Usually a single nerve block takes 5-10 minutes to perform. It takes another 15-20 minutes for onset of the nerve block. We always make sure the block is working before you go into the operating room.

HIBICLENS Pre-operative Wash



IN AN EFFORT TO MINIMIZE THE RISK OF INFECTION, IT IS IMPORTANT THAT YOU WASH WITH THE HIBICLENS WASH ***THE NIGHT BEFORE AND THE MORNING OF YOUR SURGERY***

INSTRUCTIONS

1. Rinse the surgical region with water
2. Apply Hibiclens with a washcloth to the ***SHOULDER, THEN THE ARM, & LASTLY THE ARM PIT.*** Allow it to sit for two minutes.
3. Rinse thoroughly with water.
4. Leave the region free of lotion or deodorant after the HIBICLENS wash.

WARNINGS:

- HIBICLENS is not to be used on head, neck, face or genital area.
- Keep out of eyes, ears, and mouth
- HIBICLENS is not to be used in the genital area
- HIBICLENS is not to be used if you are allergic to chlorhexadine gluconate or any ingredients in this preparation
- See HIBICLENS label for full product information and precautions