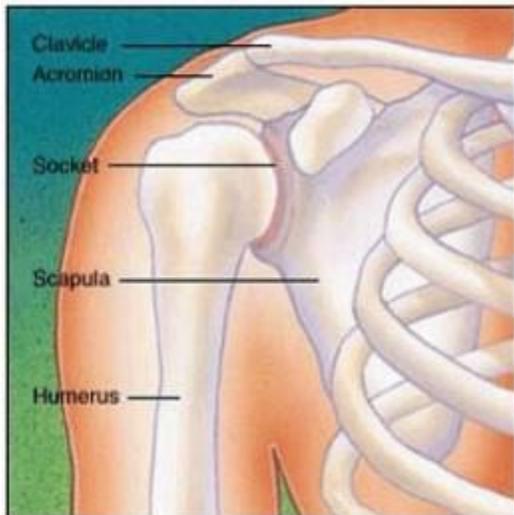
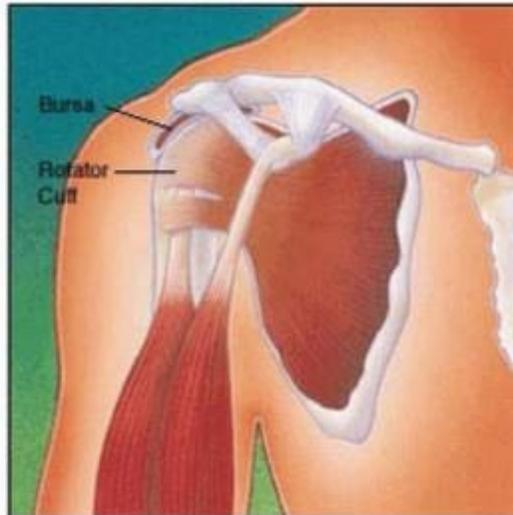


Shoulder Impingement

Alan M. Reznik, M.D., MBA



Normal Shoulder Joint



Normal Shoulder Muscles and Tendons

The tip of the scapula (shoulder blade) forms the roof of the shoulder joint is also known as the Acromion. Normally, the tendons of the shoulder (the Rotator Cuff) and a fluid-filled bursa sac have plenty of room underneath the Acromion. They glide freely in this space and it allows for a full range of motion. Overuse of the shoulder may lead to damage of the tissues underneath the Acromion process. The tendons and bursa may thicken and then pinch against the bone and/or the coraco-acromial ligament, causing irritation and pain. This is referred to as “impingement syndrome.”

Athletes and laborers who participate in sports or work that have overhead movements are at risk for this shoulder problem. People whose work involves performing repetitive shoulder movements or frequent overhead movements are also susceptible to shoulder impingement.

Some patients have anatomic variation of the acromion (an overhanging tip) and are more prone to this problem. Impingement can also occur where this bone meets the collarbone (clavicle) at the acromioclavicular or AC joint. Occasionally there are significant spurs at the AC Joint, and like a hooked acromion, the cuff is “impinged” upon by the spurs. The AC joint can also become arthritic, injured (as in a shoulder separation), or worn by repetitive motion like weight lifting or become cystic (a condition known as osteolysis of the clavicle). It too can be a source of pain.

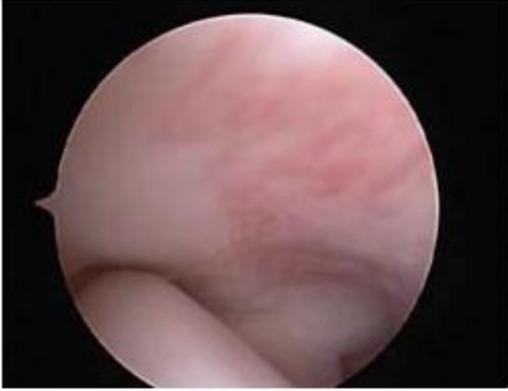


Figure 1: Inflamed RTC

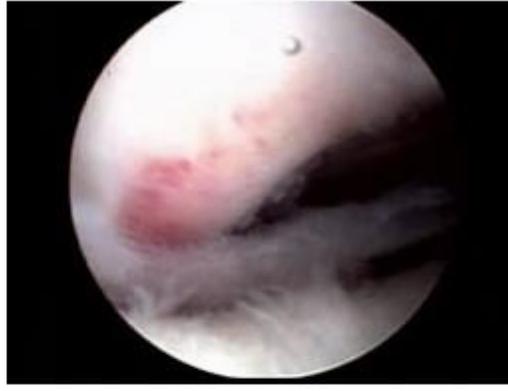


Figure 2: Spur and Bursitis



Figure 3: Abnormal AC Joint

Loss of use of the arm, pain with activity, loss of sleep or waking from sleep are common concerns with this condition and often the pain with activities of daily living (taking milk out of the refrigerator, washing your hair or putting a coat on) cause patients to seek care. The complete inability to sleep a full night can worsen and prompt treatment.

Treatment: If the problem has failed to improve with non-surgical methods and when the problem relates to an overhanging acromion, calcified acromial-clavicular ligaments, or a thickened bursa, arthroscopic surgery can help. Through the arthroscope Dr Reznik can remove any damaged tissue, increase the sub-acromial space and clear the inflamed bursa. This procedure is called an “Acromioplasty” and is done on an outpatient basis. When the AC joint is the source of pain, the spurs, arthritic surface, cysts and softened bone can also be removed arthroscopically. This is known as a “Mumford procedure” (resection of the distal clavicle). The choice of procedure depends on the problem you have and in some cases, both are needed to relieve the persistent symptoms of shoulder pain.



Figure 4: Spur Removal



Figure 5: Smoothing the Distal Clavicle

Acromioplasty/Mumford Recovery Plan (Post Op Tips for a better recovery)

Diet: You may resume a regular diet when you return home. Most patients start with tea or broth adding crackers or toast, then a non-spicy sandwich. If you become nauseated, check to see if one of your medications is upsetting your stomach, most narcotics can. If your stomach feels acidic, try Tums, Zantac or Pepcid AC to settle it and drink some clear liquids.

Lungs: After surgery you are encouraged to deep breathe and cough frequently (at least 3-4 times per day). This will reduce mucous from building up in your lungs, and will reduce the risk of developing a post anesthetic pneumonia.

Pain Control: Take medication as prescribed by Dr Reznik. Please call our office with any questions regarding your medication.

Sling: It is recommended that patients wear the sling when going out for the next 3 weeks. This will help to alert others to avoid the affected arm during this healing period.

Driving: Patient cannot drive until they are off all pain medications, completely out of the sling, and can easily place hands at 12:00 position on the steering wheel and can move hands freely from the 9:00 – 3:00 position.

Returning to Work: Most patients performing sedentary or low demand work can return to work within 7 to 10 days. They will still have restrictions on lifting (usually 5 lbs), repetitive and overhead use. Patients performing medium work that may require some light lifting may return in about 3-4 weeks. Patients with higher demand occupations with infrequent repetitive arm use will need at least 6-8 weeks. Heavy laborers or those with frequent repetitive or overhead work (as in manufacturing or construction) will need a minimum of 3-4 months and then a work conditioning program prior to returning to work.

Note: Most patients see 80% of their improvement by 4 months with the remainder occurring over the first year after surgery.

Airline Flights: Patients may fly 2-3 weeks after surgery on short flights (up to 2 hours) but in general, should wait 6-8 weeks for longer flights. You should get up and walk frequently to avoid blood clots and take an aspirin (unless allergic)

Blood Clots:

Patients at high risk for blood clots include:

- Those with long car or train commutes
- May be overweight
- Have a history of having cancer
- Females on birth control pills
- Males over the age of 40
- Prior history of a clot

These patients should be taking 1 aspirin per day for 6 weeks after surgery unless allergic to aspirin. Patients with more than two risk factors or prior history of clots should ask their primary physician if a blood thinner is required.

Call the physician or go to the ER if:

- You develop excessive, prolonged nausea or vomiting
- You develop a fever above 101
- You develop any type of rash
- You experience calf pain

Physical Therapy:

Vital to your recovery of good shoulder function is a graduated activity and exercise program to increase muscle strength and motion. You will begin simple exercises the day of surgery. Your physical therapy will begin 3-4 days after surgery. The physical therapist will guide you in your shoulder rehabilitation program. It is very important for you to start therapy when recommended.

To avoid complications, postoperative follow up appointments with your physician are also required to monitor your progress. Blood clots are rare after shoulder surgery. Patients should be up and walking as soon as comfortable. Leg and foot motion is encouraged several times during each day and they should be done every day for the first 3-6 weeks post-op to maintain blood flow and help prevent blood clots.

Post operative Instructions for Shoulder Arthroscopy Acromioplasty/Mumford

Day 1: The Day of Surgery: You will start moving your arm and simple exercises in the recovery room. When home, maintain dressing. You may add 4x4 bandages if needed for drainage through dressing. Apply ice pack for 20 minute periods throughout the day. Take care to avoid ice for too long or directly to the skin. Prolonged ice to the skin can cause frost bite.

Move your fingers and wrist often. Expect some swelling. If the color of your arm or hand changes, or sensation changes, please notify the physician. Start pendulum and wall walk (see list) exercises tonight.

**All patients find sleeping semi-upright is more comfortable the first few weeks after shoulder

surgery. A reclining chair is often most comfortable, sleeping with pillows propped on a couch will help if reclining chair not available.

Day 2: The Day after Surgery (The same as day 1.)

Day 3-4: (48 hours post-operatively) Resume same activities as the surgical day: use ice for 20 min. periods as needed. Continue gripping exercises, and be sure to move your wrist and fingers frequently. Take your dressing off and shower today. In the shower; support the affected arm with the opposite hand. In the shower; begin to flex and extend your elbow. You should move the arm freely in the shower. You may wash under the arm, but do not use a large amount of soap. Too much soap may dry out the skin and cause a rash. After your shower, dry the shoulder well and place Band-aids over incisions. Physical therapy usually begins day 3-4. It is a key part of your post op care. Continue the therapy program, each week they will be adding to your home program based on your individual progress.

**Now, use your arm sling is for comfort only, use it only as needed and when in a crowded place (this will warn people to avoid your injured area). Do your elbow, wrist, and hand exercises at least three times each day – 15 Reps.

Day 4 – 10: Change Band-aids daily or as needed. Maintain sling use for comfort. Continue with exercises as directed. Add Biceps curls and increase the circle size when doing the Pendulum exercises. Depending on what type of surgery you had and your own recovery rate, physical therapy will start 3-4 days after surgery.

Day 7 – 10: Keep your Visit with the doctor. Dr Reznik will check your motion, incisions, review your surgical findings and give you further instructions on how to continue your rehabilitation and recovery.

Exercises: do three times each

Hand Squeezes or Grip Strengthening: Using a small soft rubber ball or soft sponge, squeeze your hand. When in the shower, you can use a sponge filled with water. Do this for 3-5 sets of 10-20 repetitions each day. If this is too easy, later in the rehab course you can use a grip strengthener.

Wrist Range of Motion: Roll your wrist in circles for 30 seconds after each round of grip exercises.

Elbow Range of Motion: Turning your palm inward, towards your stomach, flex and extend the elbow as comfort allows. This rubbing you belly motion will decrease pain and prevent elbow stiffness.

Pendulum Exercise: Holding the side of a table with your good arm, bend over at the waist, and let the affected arm hang down. Swing the arm back and forth like a pendulum. Then swing in small circles and slowly make them larger. Do this for a minute or two at a time, rest, then repeat for a total of 5 minutes, 3 times per day

Biceps Curls: Curl the arm up and down 12 times; rest for one minute and repeat for a total of 3 sets of 12. When comfortable try it holding a very small can to start, in a few days you can increase can size only as comfort allows. This exercise should not be painful. If painful decrease or eliminate the weight.

Wall Walking: Stand facing a blank wall with your feet about 12 inches away. “Walk” the fingers of the affected hand up the wall as high as comfort allows. Mark the spot and try to go higher next time. Do at least 10 repetitions, 3 times per day. When more comfortable and stronger (not before three weeks) do these exercise sideways, with the affected side facing the wall. Do not let the hand drop

down from the wall- walk your fingers down as well as up. Dropping the arm will strain the repair and be painful. If having weakness on the way down, feel free to use the other arm to help.

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