SHOULDER, KNEE & SPORTS MEDICINE

Superior Capsular Reconstruction

Indications for Surgery

The rotator cuff is a group of four muscles that run from the scapula (shoulder blade) and attach to the humeral head (top of upper arm bone) by their tendons. The rotator cuff is necessary to stabilize the shoulder in the socket during movement. When the rotator cuff is torn and left untreated for an extended period of time, the tendon retracts away from its attachment point and the muscle atrophies and degenerates (shrinks, weakens, and irreversibly turns to useless fat and scar tissue). In some cases, the chronic tear becomes irreparable and treatment options include living with the deficit, muscle transfers, reverse shoulder replacement, or reconstructing the torn rotator cuff. In specific cases, the superior capsule of the glenohumeral (shoulder) joint can be reconstructed (re-made) with an iliotibial band tendon (patient's own tendon along the lateral thigh) autograft, or a dermal allograft (thick cadaver skin). Additionally, Dr. Chudik often can mobilize and re-attach the torn atrophied rotator cuff muscle to the graft which serves to reconstruct the irreparable rotator cuff as well.



MRI of intact rotator cuff tendon



MRI of massive supraspinatus tendon tear retracted almost to glenoid.

Contraindications to Surgery

- Infection
- Shoulder stiffness
- Tears that involve too much of the rotator cuff, particularly the subscapularis



Orthopaedic Surgery & Sports Medicine Teaching & Research Foundation otrfund.org 630-324-0402 ● contactus@chudikmd.com stevenchudikmd.com



SHOULDER, KNEE & SPORTS MEDICINE

- Inability or unwillingness to complete the post-operative program including immobilizing the shoulder in a sling for six to eight weeks and performing physical therapy three times per week for six months
- Patients with poor general health which is not sufficient to proceed with surgery
- Arthritis

Potential Surgical Risks and Complications

- Infection
- Injury to nerves (numbness, weakness, paralysis) of the shoulder and arm (rare)
- Continued or recurrence of pain
- Re-tear of the rotator cuff tendon/graft
- Detachment of the deltoid muscle if open surgery is performed. Dr. Chudik performs this procedure arthroscopically.
- Stiffness or loss of motion of the shoulder
- Inability to return to the same level of athletics or work
- Persistent weakness of the shoulder
- Late acromioclavicular (AC) joint pain
- Rare finding of a tear that is larger than can be reconstructed at the time of surgery.
 Preoperatively, MRI is limited and reparability of the rotator cuff tendon is not always completely predictable. Fortunately, most tears are technically reconstructable.
 Additionally, sometimes the tear is found to be reparable and the graft is not needed.
- Finding damage to other structures such as the biceps tendon, labrum and articular cartilage that may require further treatment at the time of surgery.

Hospitalization and Anesthesia

- Outpatient surgery (you go home the same day)
- General anesthetic with interscalene block (See Your Surgical Experience booklet)

General Surgical Technique

Dr. Chudik approaches rotator cuff tears arthroscopically through small incisions (arthroscopic portals). The surgery is generally performed as outpatient surgery (you go home the same day). Dr. Chudik uses the small incisions to look in the shoulder joint with a camera, and special instruments are used to identify, release, mobilize and repair as much of the rotator cuff as possible. If a large portion of the supraspinatus of the rotator cannot be repaired, either an iliotibial band autograft from the thigh or a dermal allograft (sterilized donor tissue) is prepared and inserted into the shoulder through arthroscopic portals. The graft is then

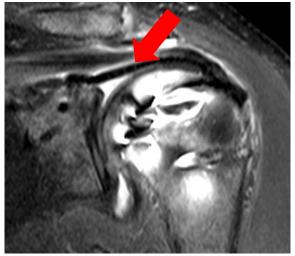


Orthopaedic Surgery & Sports Medicine Teaching & Research Foundation otrfund.org 630-324-0402 ● contactus@chudikmd.com stevenchudikmd.com



SHOULDER, KNEE & SPORTS MEDICINE

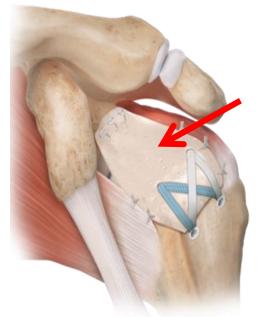
attached across the top of the glenohumeral joint from the glenoid (socket) to the humerus (upper arm bone) with sutures and anchors. Often, the irreparable rotator cuff can be mobilized and incorporated to reconstruct the rotator cuff in attempt to restore some of the function. The graft and rotator cuff heals gradually in four to six months, but full rehabilitation can require six to 12 months.



Post-operative MRI showing successful superior capsular CR graft intact and in anatomic position

Preoperative Instructions

- Discontinue birth control pills
- Stop blood thinners such as aspirin, Coumadin[®], Lovenox[®], Xarelto[®] according to the prescribing doctor's directions
- Stop anti-inflammatory medicines such as ibuprofen, Advil[®], Motrin[®], Naprosyn[®], Alleve[®], etc.
- Stop nutritional supplements and drinks like Vitamin C, ginseng, ginkgo biloba, etc.
- Stop smoking for surgery and during the first six weeks postoperatively to allow proper tissue healing
- Do not eat or drink anything from midnight, the evening before surgery



Superior capsular graft fixed in place to resist upward motion of the humerus and better maintain the central fulcrum of the shoulder joint when the arm is raised



Orthopaedic Surgery & Sports Medicine Teaching & Research Foundation otrfund.org 630-324-0402 ● contactus@chudikmd.com stevenchudikmd.com



SHOULDER. KNEE & SPORTS MEDICINE

Post-Operative Course

- You will use a sling at all times except for bathing, dressing and exercising for six to eight weeks following surgery, especially while you sleep. This prohibits driving.
- You **WILL NOT** be allowed to actively move your repaired shoulder (moving it with its own shoulder muscles) and possibly your elbow (if the biceps tendon is involved) for at least six to eight weeks following surgery in order to protect the repair and allow healing. After surgery, you may feel more comfortable sleeping sitting upright (on a couch or recliner chair)
- Keep the wound clean and dry for three days following all arthroscopic surgery and ten to 14 days following open surgery. You may shower lightly after three days (all arthroscopic) and 14 days (open surgery), but wounds cannot be submerged under water for three weeks.
- Driving after six to eight weeks when out of the sling.
- Return to school/sedentary work in less than one to two weeks as long as you are in your sling and do not use the extremity. No typing, writing or purposeful movement.
- Physical therapy should begin two to three days after surgery and continue for four to six months. The success of rotator cuff repair is highly dependent on the post-operative rehabilitation. It is crucial to follow through on and maintain a proper therapy schedule.

Return to Activity

You may return to unlimited activities when there is no pain and full shoulder range of motion, muscle strength and endurance, and functional use has been restored. This usually requires six months to a year following a superior capsular reconstruction. Dr. Chudik will tell you when it is safe to resume all activities. Dr. Chudik has special protocols for returning to golf.

Scheduling Surgery

Contact Dr. Chudik's surgery scheduler at 630-324-0402 or *contactus@chudikmd.com* to:

- Schedule the date and location of surgery (the hospital will call the day before with the confirmed arrival time)
- Schedule a pre-operative appointment
- Schedule a post-operative appointment to remove sutures and review post-operative instructions

Notify My Office if Symptoms Worsen



otrfund.org

