SHOULDER ARTHROSCOPY: ROTATOR CUFF TEAR, SLAP LESION, INSTABILITY

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SHOULDER ARTHROSCOPY:

Arthroscopic surgery of the shoulder is a minimally invasive procedure allowing visualization and treatment of many problems inside your shoulder joint. The procedure is performed as an outpatient, which means you are able to go home after the surgery. Anesthesia for shoulder arthroscopy is usually a combination of general anesthesia (being put to sleep) and local anesthesia with an interscalene (neck) nerve block. The nerve block will numb your arm for pain control after surgery and can last up to 16 hours.

Three incisions measuring less than 1cm each are in the skin on the back, front, and side of your shoulder. Several smaller accessory incisions are required for some repairs. A small camera is inserted through the back incision, and tools are manipulated through the other two. The shoulder is filled with fluid to allow movement and visibility within the joint. The interior of the shoulder and subacromial space (above the rotator cuff) are visualized and evaluated for problems during the procedure.

Once the surgery is complete, the shoulder is drained of all the fluid. Dressings are taped in place, and a cooling device (cryocuff) will be placed on your shoulder. Your arm will be placed in a sling or pillow immobilizer depending on the proceedure. The surgical procedure takes about 1 ½ to 3 hours. You will then require 1 ½ to 2 hours in the recovery room prior to being released home.

THE ROTATOR CUFF:

The rotator cuff is a group of four muscles which attach via tendons to the upper humerus (arm bone) at the shoulder. These muscles are very important for shoulder motion and stability. The most frequently injured muscle is the supraspinatus which sits on top of the shoulder. Injury can occur with a sudden traumatic event, but more commonly is a result of “wear and tear” over time. Often there is a bony spur above the rotator cuff which impacts the tendon with overhead and behind the back motion. This painful impact is called impingement syndrome. Usually the patient describes a sharp pain with these motions, and the resultant tendinitis and inflammation can even make sleep painful. In the case of a full thickness tendon tear, weakness and loss of motion can be seen. Physical examination of the shoulder usually provides the diagnosis, but an MRI is routinely performed to confirm the diagnosis.

Treatment of rotator cuff disease begins with conservative therapy including anti-inflammatory medications, steroid injection, and physical therapy to strengthen and heal the muscle. If symptoms persist and an MRI shows a tear, surgical repair is recommended.

Repair of the rotator cuff is an arthroscopic procedure. The torn rotator cuff tendon is reattached to its bone “footprint” using bio-absorbable anchors and suture, sewing the rotator cuff to its natural position. During the proceedure a spur is typically removed from the undersurface of the bone (acromion) above the rotator cuff. This

decompresses the space and allows for better healing. In a small percentage of patients with an atypical tear shape or poor tissue quality, a "mini-open" proceedure is required. This involves extending the skin incision on the side of the shoulder to 3-4 cm.

For the first 4 days after surgery the pillow immobilizer is not removed. The dressing and sutures will be removed at the first office visit 4 days after surgery. Pendulum exercises are started at that time, and physical therapy will be scheduled. Active lifting of the arm is restricted for approximately 4 weeks, but the physical therapist will teach exercises to passively move the shoulder. (Using the rotator cuff muscles to lift the arm is defined as *active* motion. *Passive* motion is shoulder movement created by an outside force like gravity or your therapist.) **Early passive motion of the shoulder is crucial to avoid stiffness.** The length of time spent in the shoulder immobilizer depends on the size of the tear. For average size tears the immobilizer is worn at all times for 4 weeks, and then at night for an additional 2 weeks. Full recovery from rotator cuff repair surgery can take 4 to 6 months.

THE SLAP LESION:

The labrum is a lip of soft tissue surrounding the cup (glenoid) of the shoulder joint. The shoulder joint is shaped like a golf ball on a golf tee, with a relatively large humerus head sitting in a shallow glenoid. The labrum around the glenoid adds to the stability of the joint. It also serves as an attachment for one of the biceps tendons. Through a single trauma or repetitive injury the labrum can tear and detach from the bone of the glenoid. This tends to begin at the upper (superior) aspect of the shoulder near the biceps tendon and progresses to the front (anterior) and back (posterior). This injury is described as a SLAP (Superior Labrum Anterior Posterior) tear.

Patients with a SLAP lesion typically describe painful popping with twisting, reaching, and throwing activities. Diagnosis is confirmed by an MRI. Surgical repair of the lesion involves an arthroscopic procedure. The labrum is typically frayed, and it is debrided using a shaver. Sutures are passed around the labrum, and it is then reattached to the glenoid using bone anchors.

For the first 4 days after surgery the shoulder immobilizer is not removed. The dressing and sutures will be removed at the first office visit 4 days after surgery. Pendulum exercises are started at that time, and physical therapy will be scheduled. The immobilizer is worn for 3-4 weeks, and elbow flexion against resistance is restricted for 4-6 weeks. Full recovery and return to sports after a SLAP lesion repair can take 3-5 months.

SHOULDER INSTABILITY:

Dislocation or partial dislocation (subluxation) of the shoulder typically results from a traumatic incident. If the shoulder continues to dislocate despite rest and strength therapy, surgical treatment may be necessary.

Like the SLAP lesion, recurrent shoulder instability is usually related to an injury to the shoulder labrum. Anterior shoulder dislocations are the most common, with the humeral head exiting the front of the joint. This tears the anterior labrum away from the glenoid. This labrum injury is termed a Bankart lesion, and it allows the humerus to recurrently dislocate with certain motions and activities. Arthroscopic surgery is

performed to repair the Bankart lesion. Suture and bone anchors are used to reattach the labrum to the glenoid.

For the first 4 days after surgery the shoulder immobilizer is not removed. The dressing and sutures will be removed at the first office visit 4 days after surgery. Pendulum exercises are started at that time, and physical therapy will be scheduled. The immobilizer is worn for 4 weeks, and shoulder extension and external rotation are initially limited. The physical therapist will guide your range of motion restrictions. Full recovery and return to sports after a Bankart lesion repair can take 3-5 months.

AFTER SURGERY:

Most patients will have soreness and swelling in their shoulder after surgery. This is controlled with pain pills and ice. Pain should begin to improve after the first 48 hours. The cryocuff should be used continuously for 48 hours after the surgery, and then as needed for swelling. Most patients also find the cryocuff useful during the rehab period to combat swelling after physical therapy sessions.

A pain medication like Norco, Vicodin, or Darvocet will be prescribed prior to surgery. This is typically required for the early postoperative pain. When taking these medications you should also take Colace (Docusate) as a stool softener to prevent constipation. Colace can be found at the pharmacy and does not require a prescription. You can switch to Tylenol or Motrin as soon as your pain allows.

Usually you will be sent home with thigh stockings on both legs. These are used to decrease swelling and decrease the chance of blood clots. The stockings can be removed after 48 hours.

A follow up appointment will be scheduled about 3-5 days after surgery in order to check your incisions. The dressing and sutures will be removed in the office at that time, and we will review pictures from your surgery. You will be allowed to shower after the first appointment. In order to avoid infection, do not submerge your incisions in a bath, pool, or tub until they have healed completely. This usually takes 2-3 weeks.