

Marc R. Safran, MD Professor, Orthopaedic Surgery Chief, Division of Sports Medicine

ANTERIOR SHOULDER STABILIZATION SURGERY

INDICATIONS (Who Needs Surgery, When, Why & Goals)

Surgery for shoulder instability is reserved for people who have recurrent shoulder dislocations or subluxation that affects activities of daily living and/or sports activities. It is usually reserved to those patients that have tried an appropriate rehabilitation program for at least 3-6 months with symptomatic recurrent shoulder dislocation and/or subluxation. Surgery is occasionally recommended for some individuals after the first dislocation. Traumatic anterior dislocations have up to an 80% likelihood of recurrent dislocations, particularly in young patients. The likelihood of success of a rehabilitation program is only 20% in this group, while older patients or anterior dislocation that is not associated with trauma may have up to 80% success with rehabilitation. Surgery may also be performed in a patient who has had a prior operation for shoulder instability. The goal of surgery is to stabilize the shoulder to prevent further subluxations or dislocations. One of the reasons the shoulder is the most commonly dislocated major joint is the fact it has more motion than any other major joint. Thus, tightening the shoulder joint may reduce some shoulder motion. Stabilizing the shoulder is done by reattaching the labrum to the glenoid (socket) and tightening the capsule and ligaments. Less often other structures may be moved or used to replace or give additional support to the ligaments of the shoulder. Recurrent dislocations or subluxations without fracture is rarely associated with arthritis. Thus, the timing of surgery in relation to the injury is not critical.

CONTRAINDICATIONS (Reasons Not To Operate)

- Infection of the shoulder
- Inability or unwillingness to complete the post-operative program of keeping the shoulder in a sling and/or immobilizer or to perform the rehabilitation necessary.
- Patients who have emotional or psychological problems that contribute to their shoulder condition
- Multidirectional or posterior instability
- Patients who have voluntary instability (dislocate their shoulder at will, particularly for secondary gain)
- Surgery is not always as good if the patient has generalized looseness of joints.
- Shoulder arthritis is a relative contraindication

RISKS AND COMPLICATIONS OF SURGERY

- Infection
- Bleeding
- Injury to nerves (numbness, weakness, paralysis) of the shoulder and arm most commonly the axillary nerve (to the deltoid muscle and skin of the outer shoulder) and musculocutaneous nerve (to the biceps muscle and skin of the outer forearm)
- Recurrence of instability (dislocation and/or subluxation)
- Continued pain
- Detachment of the subscapularis muscle
- Stiffness or loss of motion of the shoulder
- Inability to return to same level of competition
- Moving or breaking of surgical anchors
- Arthritis



Marc R. Safran, MD Professor, Orthopaedic Surgery Chief, Division of Sports Medicine

TECHNIQUE (What is Done)

Different techniques are in use at this time. There are arthroscopic techniques and open techniques. The overall goal is to reattach the labrum to the glenoid (when it is detached) and tighten the capsule and ligaments. In some situations an open surgery to add bone to the front of the socket may be recommended.

One of the most popular open techniques involves going between the deltoid and pectoralis muscles to get to the subscapularis muscle which covers and is partially attached to the capsule of the shoulder. The subscapularis muscle-tendon is either split in line with its fibers or all or part of it is removed from the arm bone. The capsule is separated from the subscapularis muscle and tendon. The capsule is then cut and labrum repaired to the glenoid (when necessary) with sutures (threads) with or without surgical anchors which are inserted into the glenoid rim. If the capsule and ligament are stretched, the shoulder is tightened by folding the excess capsule underneath itself and stitching it together.

Arthroscopic techniques involve using small incisions (arthroscopy portals) to repair the labrum to the glenoid (when necessary) with sutures (threads) with or without surgical anchors which are inserted into the glenoid rim. If the capsule and ligaments are stretched, the shoulder is tightened either by folding the excess capsule underneath itself and sewing it together or using heat to shrink the it.

Other techniques involve techniques that do not try to replicate the normal anatomy of the shoulder capsule and ligaments. These include techniques that involve moving muscle to reduce shoulder motion or moving bone from another area and using the bone to prevent shoulder dislocations. Specifically, in some situations where there is bone loss of the front of the socket, part of the coracoid (the bony prominence in the front of the shoulder) is cut and moved to the front of the socket (Latarjet or Bristow procedure). The bone is held to the socket by screws.

POST-OPERATIVE COURSE

- Management after surgery varies based on technique used and surgeon preference as well as arm dominance and the sport you participate in.
- Keep wound clean and dry for the first 10 14 days after surgery
- Keep the shoulder in a sling, brace or immobilizer for as long as your surgeon tells you, usually 3 8 weeks
- You will be given pain medications by your physician
- You may be told to perform passive motion exercises (not using the operated shoulder's muscles to move the arm) after surgery
- Post-operative rehabilitation and exercises are very important to regain motion and then strength

RETURN TO SPORTS

- Depends on the type of sport and position as well as the quality of ligaments and capsule at the time of repair.
- A minimum of 3 months is necessary after surgery before return to sports, though usually it requires 6 months.
- Full shoulder motion and strength are necessary before returning to sports

NOTIFY OUR OFFICE IF:

- You experience pain, numbness, or coldness in the hand
- Blue, gray or dusky color appears in the fingernails
- Any of the following occur after surgery:
 - Increased pain, swelling, redness, drainage or bleeding in the surgical area.
 - Signs of infection (headache, muscle aches, dizziness, or a general ill feeling with fever)
- New, unexplained symptoms develop. Drugs used in treatment may produce side effects.

Do not eat or drink anything before surgery. Solid food makes general anesthesia more hazardous.

© Marc R. Safran, MD 2018