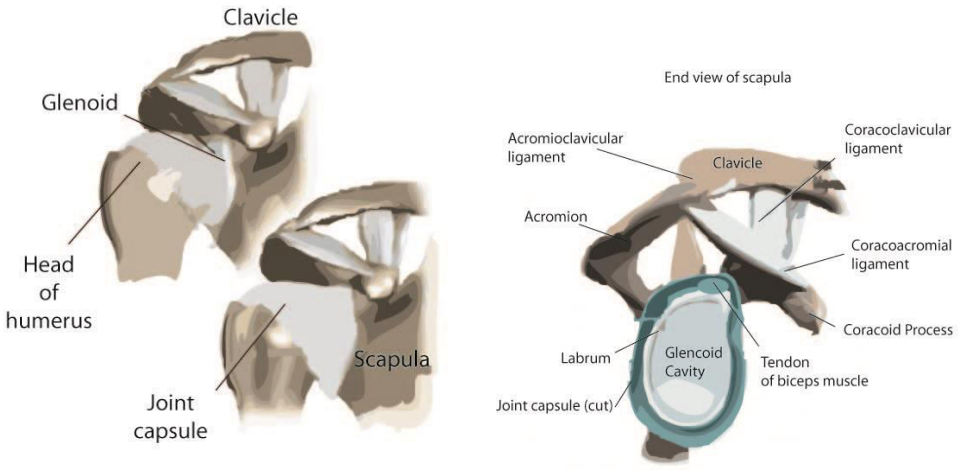
Shoulder Instability

Shoulder instability describes a range of conditions affecting the shoulder. Instability means that the shoulder joint is too loose and is able to slide around too much in the socket. In some cases the shoulder actually slips out of the socket and becomes dislocated. In a normal shoulder the ball portion of the joint moves approximately one inch forward or backward within the socket. Instability results when movement is too great and becomes painful. Shoulder instability can cause you to have an unstable feeling in your shoulder or can cause pain.

Anatomy of the Shoulder

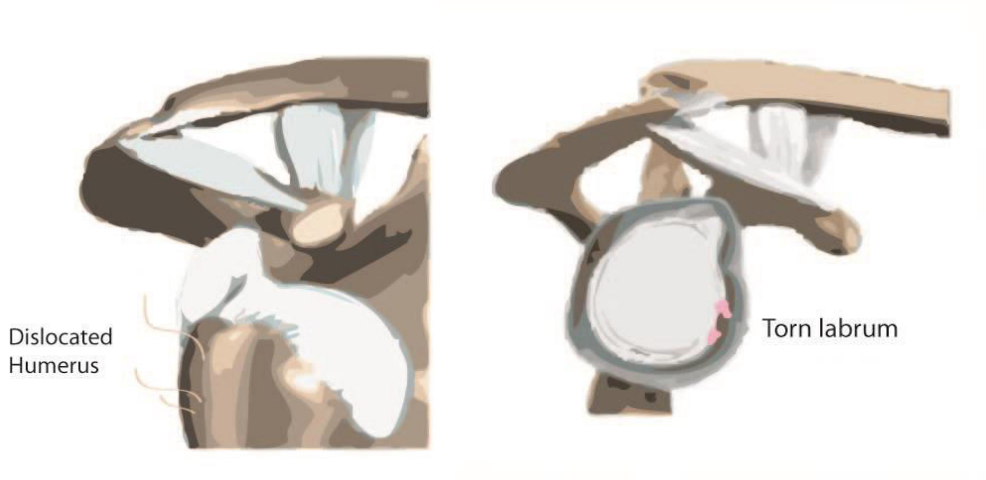
The shoulder is made up of two joints, the acromioclavicular joint and the glenohumeral joint. The acromioclavicular joint is where the acromion, a part of the shoulder blade (scapula) and the collar bone (clavicle) meet. The glenohumeral joint is where the ball (humeral head) and the socket (the glenoid) meet. The rotator cuff connects the humerus to the scapula and is made up of the tendons of four muscles, the supraspinatus, infraspinatus, teres minor and the subscapularis. Tendons attach muscle to bone. Muscles in turn move bones by pulling on the tendons. The muscles of the rotator cuff keep the humerus tightly in the socket. The socket, or the glenoid, is shallow and flat. It is rimmed with soft tissue called the labrum that makes a deeper socket that molds to fit the humeral head. Ligaments in the joint capsule also contribute to shoulder stability. The joint capsule surrounds the shoulder joint. It is a fluid filled sac that lubricates the joint. The ligaments tighten in certain arm positions, holding the ball in the socket.



Causes of Shoulder Instability

Shoulder instability often follows an injury that causes the shoulder to dislocate. This initial injury is usually fairly significant. It is important that the shoulder be reduced, or put back in

the socket. Sometimes individuals can achieve this on their own; however, often physician assistance is required in the Emergency Department. Two injuries occur with a dislocation that often leads to recurrent dislocations. 1. The labrum is often torn away from the bone. 2. The ligaments in the capsule are stretched (like a rubber band that has been overstretched- it becomes loose and floppy.) In patients over the age of 40, the rotator cuff can be torn as well. An unstable shoulder can result in repeated episodes of dislocation, even during normal activities.



In some cases, shoulder instability can happen without previous dislocation. People who do repeated shoulder motions may gradually stretch out the joint capsule. This is especially common in athletes such as baseball pitchers, swimmers and volleyball players. If the joint capsule gets stretched out and the shoulder muscles weaken the ball of the humerus begins to slip around too much within the shoulder. Eventually this can cause irritation and pain in the shoulder.

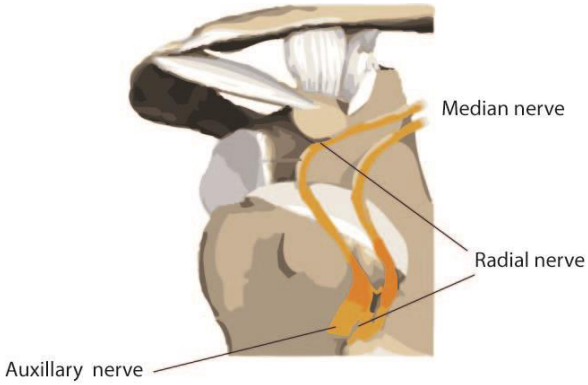
A genetic problem with connective tissues of the body can lead to ligaments that are too elastic. When ligaments stretch too easily, they may not be able to hold joints in place. All the joints in the body may be too loose. Some joints, such as the shoulder, may be easily dislocated. People with this type of condition are sometimes referred to as double jointed.

Symptoms of Shoulder Instability

Chronic instability causes several symptoms. When the shoulder slips, but does not dislocate, or come completely out of the socket, it is called subluxation. The shoulder may actually feel loose. This commonly happens when the hand is raised above the head. Subluxation of the shoulder usually causes a quick feeling of pain, like something is slipping or pinching in the shoulder.

The shoulder may become so loose that it starts to dislocate frequently. This can be a real problem, especially if you can't get it back into the socket and must go to the emergency room for assistance to get the shoulder back into the joint. A shoulder dislocation is usually very painful and the shoulder may look abnormal in appearance. Any attempted movement results in extreme pain. A dislocated shoulder can also lead to damage of the nerves around the shoulder.

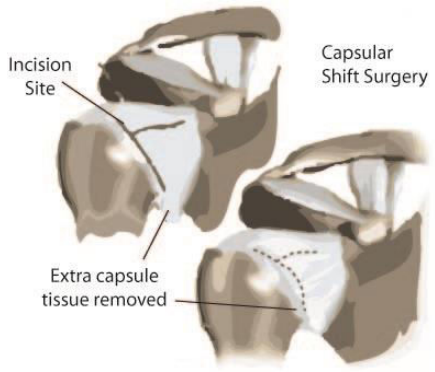
If the nerves have been stretched, a numb spot may develop on the outside of the arm, just below the top point of the shoulder. Several of the shoulder muscles may become slightly weak until the nerve recovers. The weakness is usually temporary.



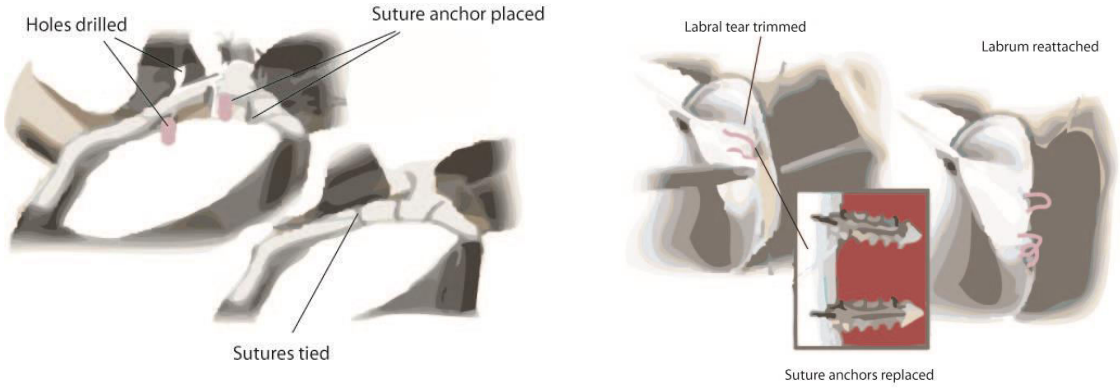
<u>Surgical Treatment for Shoulder Instability</u>

There are several types of shoulder operations that stabilize the shoulder. The surgery may be done using an arthroscope or through an incision made in your skin depending on the type of injury you have and the type of surgery needed. Shoulder arthroscopy is a minimally invasive surgical technique that allows Dr. Omid to evaluate your shoulder and in some cases treat the cause of instability. During the procedure Dr. Omid will make small incisions in your shoulder called portals. A tiny camera is then placed in the portals and the interior space of the shoulder can be visualized. The following are among the more commonly performed surgeries.

- *<u>Capsular shift</u>*- this procedure is performed to tighten the joint capsule. A capsular shift is commonly performed using an arthroscope. In this procedure your surgeon tightens the capsule, including the ligaments that stabilize the shoulder. This is similar to when a tailor tucks loose fabric by overlapping and sewing the two parts. By tightening the ligaments, they are then able to perform their stabilizing function.



- *<u>Labral repair (Bankart repair)</u>*- this procedure is performed to repair a tear to the labrum and is also commonly done using the arthroscope. In small tears it is sometimes not necessary to repair the tear, but rather to débride. A debridement is simply removing the frayed edges and any loose parts that get caught when your shoulder is moved. A larger tear is repaired using suture anchors and heavy suture to reattach the labrum to the socket. An open procedure may be necessary if the bone of the socket is involved in the injury. In this scenario, Dr. Omid would make the repair through longer incision on the front of your shoulder. This would be closed with suture and steri-strips.



- *<u>Latarjet procedure</u>*- this procedure is done when there is bone loss from the socket due to repeated dislocations or in the revision situation. It is done as an open procedure. A small piece of bone is taken from another part of the shoulder and is placed into the worn away area of the shoulder socket. This is called a bone graft procedure. It is attached using metal screws.

<u>Preoperative Planning</u>

Depending on the location of your surgery it may be required to have preoperative testing. In some cases blood work, EKG (heart tracing), or a chest X-ray may be needed. A chest x-ray is only done if you have a lung condition or a history of cigarette smoking. If any of these tests are

needed they will be scheduled for you and will be done during pre-testing when you meet with the anesthesia staff. If it has been some time since you have seen your primary care physician and you have a lot of medical problems, it would be best that you see your medical doctor before your pre-test date.

You will arrive at the hospital approximately two hours before your scheduled surgery time. Procedures are performed on a "to follow" basis. Occasionally, a procedure scheduled ahead of yours may take longer than expected, so there may be some delay before your surgery. Regardless, it is important that you arrive on time. Sometimes an earlier procedure will cancel and we run ahead of schedule. You should not have anything to eat or drink after midnight the night before surgery. You may be advised to take some of your medications with a sip of water only. The anesthesia staff will discuss this with you at the time of your pre-testing. Upon arrival to the hospital you will go through a check-in process. At the appropriate time you will be brought into a pre-operative holding area. At this point the nurse will see you, review your records, and an IV will be started. A member of the anesthesia team will meet with you to discuss any anesthesia concerns and anesthetic options. Your surgery will be performed under general anesthesia (you will go to sleep.) In addition, the anesthesiologist may recommend a regional block if they think that you are a good candidate. This involves an injection of local anesthetic (numbing medicine) or placement of a catheter near the nerves at the base of the neck. These blocks are generally recommended to help control your pain following surgery. The anesthesiologist will discuss the risks of the block and the decision to perform this is a mutual decision between the patient and the anesthesiologist.

You can anticipate that your surgery will last approximately 1 ½ to 2 ½ hours, although this varies depending on the type of shoulder arthroscopy for which you are scheduled. If you have family members with you they will wait for you in the waiting room. Dr. Omid will speak with them immediately after your surgical procedure to let them know that you are finished. During your surgery, family members should plan on remaining in waiting area in order to be accessible at the completion of the procedure, if your family member is not available there may not be another opportunity to speak with Dr. Omid that day. Belongings will be stored in a locker in the pre-operative area.

When you wake from surgery you will be located in the post-operative recovery room. Unfortunately family members cannot be present with you at this time as there are many other patients and many nurses in this area. Once you have been stabilized and are comfortable family members will be invited to sit with you while you continue recovering from anesthesia. Criteria for discharge include that your pain is under control and that you are eating, drinking, and able to walk to the bathroom with minimal assistance. You will have a dressing on your shoulder and your arm will be immobilized in a sling.

Risks and Complications

The list below includes some of the common possible side effects from this surgery. Please note that this list includes some, but not all, of the possible side effects or complications. Complications may include complications from anesthesia, infection (very rare with

arthroscopic procedures), nerve injury (extremely rare), blood vessel injury (extremely rare), bleeding (extremely rare), shoulder stiffness, failure of repair, recurrent instability, failure of the anchors or sutures, failure to improve your symptoms as much as you had hoped, a blood clot can form in your arms or legs and very rarely travel to your lungs, complex regional pain syndrome (a painful condition involving the arm).

Postoperative Care

1. Sling instructions. After surgery your shoulder will be placed in a sling. The sling should be worn as directed by Dr. Omid. The sling is used to limit motion of your shoulder. In some cases where the repair must be carefully protected, your arm may be placed in a sling with a pillow that is attached around your waist or a specially made brace. It is very important to wear your sling as directed by Dr. Omid after surgery. You may remove your arm from the sling to bend and straighten your elbow and to move your fingers several times a day. You may remove the sling to bathe, dress, and perform elbow range of motion several times a day. It is important to wear the sling while sleeping.

2. Diet. We recommend that you eat a light diet the evening of surgery and the next day but you may resume eating a regular diet as soon as you tolerate it.

3. Pain control. When you are discharged from the hospital you will be given a prescription for pain medicine. You may take this medicine as prescribed. You will be given the option to purchase a cold pack machine. This machine has a sleeve which is attached to an ice cooler. You place ice and some water in the cooler and plug this in to a regular outlet. This circulates cold water through the shoulder sleeve providing relief of pain and swelling after surgery. You should keep ice on the shoulder frequently for the first 48-72 hours after surgery. We recommend icing 2-3 times per day for the first week especially before sleep. We do recommend that you put a t-shirt or a thin towel between you and the sleeve so that it doesn't injure your skin.

4. Wound care. You may remove your dressing and shower 48 hours after surgery if your surgery was performed arthroscopically and you do not have a pain catheter. If you have a pain catheter, this should be removed by a family member 72 hours after surgery along with the shoulder dressing. If your surgery was performed through an open incision, you may remove your dressing 5 days after surgery. After your dressing is removed you may shower. You may not get in a hot tub or pool and immerse the incisions underwater for six weeks but you may get in the shower and let the water run over them. Pat the incisions dry afterwards, and place band-aids over the incisions. There is no need to place any ointment over the incisions. It is better to keep them dry. Sometimes significant bruising is seen in the front of the shoulder or along the biceps muscle. This is normal and is related to minor internal bleeding after surgery. If you notice drainage from the incisions, swelling or increased pain 5 days after surgery please call the office. Redness around the incision is very common and should not be a

concern unless it is associated with drainage 5 days after surgery, redness spreading away from the incision or fevers.

5. Sleep. It is often very difficult to sleep in the week or two following shoulder surgery. The surgery itself may interfere with your sleep-wake cycle. In addition, many patients have increased shoulder pain lying flat on their back. We recommend that you try sleeping in a recliner or in a reclined position in bed. This is often much more comfortable. You may place a pillow between your body and your arm and also behind your elbow in order to move your arm away from your body slightly. This often helps with the pain. You should wear your sling when you sleep.

6. Driving. Operating a motor vehicle may be difficult due to you inability to use your operative arm. If you should have an accident or get pulled over while wearing a sling, the authorities may consider that driving while impaired. The decision to drive is based on your comfort level with driving essentially one-handed and your insurance company. If you need to drive you should wait at least until you have seen Dr. Omid at the first postoperative visit. Once you are out of your sling you may drive once you feel safe operating a vehicle. No one should operate a motor vehicle while taking narcotic medications. Please limit car driving until you are off narcotics.

7. Physical therapy. The decision to prescribe physical therapy and when to start these activities is made on a case by case basis. This will be discussed with you on your first postoperative visit. It is rare that Dr. Omid will prescribe therapy before your first postoperative visit. You may be instructed to begin gentle range of motion exercises on the day of surgery. These will be self directed exercises that you start on your own.

Medications to Avoid Before and After Surgery

Medications that increase the chances that you will bleed excessively after surgery include:

1. Aspirin, enteric-coated, baby, and plain aspirin or any other product containing aspirin. In some cases, we may recommend stopping your aspirin 1 week before surgery. In others cases, low-dose aspirin may be continued based on your medical condition. Please discuss with Dr. Omid.
2. Coumadin – discuss this with the prescriber as to the best time to stop this medication before surgery.
3. Celebrex- stop 1 week prior to surgery.
4. Ibuprofen (Advil, Motrin) - stop 1 week prior to surgery
5. Naprosyn (Aleve) - stop 1 week prior to surgery
6. Plavix – discuss this with the prescriber as to the best time to stop this medication before surgery
7. Some over-the-counter herbs can also effect bleeding. These include chondroitin, dan shen, feverfew, garlic tablets, ginger tablets, ginkgo, ginseng, and quilinggao and fish oil.

After surgery you should avoid all anti-inflammatory medications including ibuprofen (Advil, Motrin) and Naprosyn (Aleve) and any other prescription anti-inflammatories, unless Dr. Omid prescribes them. You may take Tylenol (acetaminophen) unless otherwise instructed not to do so.

Follow Up Appointment

PATIENTS ARE SEEN IN THE OFFICE 8-14 DAYS AFTER SURGERY FOR SUTURE REMOVAL. IF YOU HAVE NOT BEEN SCHEDULED FOR A FOLLOW UP, PLEASE CALL THE OFFICE TO SET UP AN APPOINTMENT AT 323-442-5860. WE WILL THEN SCHEDULE YOUR SECOND FOLLOW UP APPOINTMENT FOR APPROXIMATELY 2 TO 4 WEEKS THEREAFTER.

Emergencies

Signs of an emergent situation include increasing redness, swelling, and significant drainage from the incision site, a fever greater than 101.5, inability to tolerate food and fluids after surgery. In rare cases, temporary breathing difficulties can occur in patients who have had a regional block or a pain catheter. If you find that you have any of these situations, it is advisable that you call 323-442-5860 anytime of the day or night when the office is closed so that emergent care can be initiated for you.