

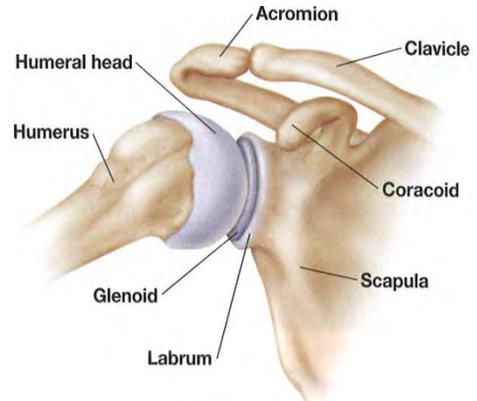
# Shoulder Instability

The shoulder is your body's most flexible joint. It is designed to let the arm move in almost any direction. But this flexibility has a price, making the joint prone to injury. The shoulder is made up of bones, muscles, ligaments, and tendons. They work together so you can comfortably reach, swing, lift, and throw a ball. Learning about the parts of the shoulder will help you understand your shoulder problem.

## Anatomy

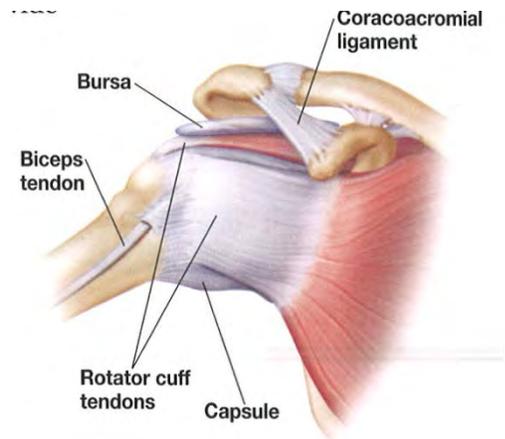
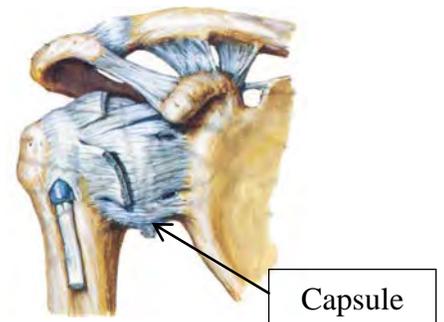
Bones provide the foundation of the shoulder joint. The bones fit together in a way that allows the arm to move freely.

- The humeral head is the ball at the top of the humerus (arm bone).
- The glenoid is the shallow socket located on the scapula (shoulder blade).
- The labrum is a ring of cartilage around the rim of the glenoid. Important ligaments attach to the labrum and connect to the humerus. The labrum and these ligaments provide stability to the shoulder joint.
- The coracoid and acromion are two other parts of the scapula. Muscles attach on these structures.
- The clavicle is the collar bone. The clavicle connects to the acromion, forming the acromioclavicular (AC) joint.



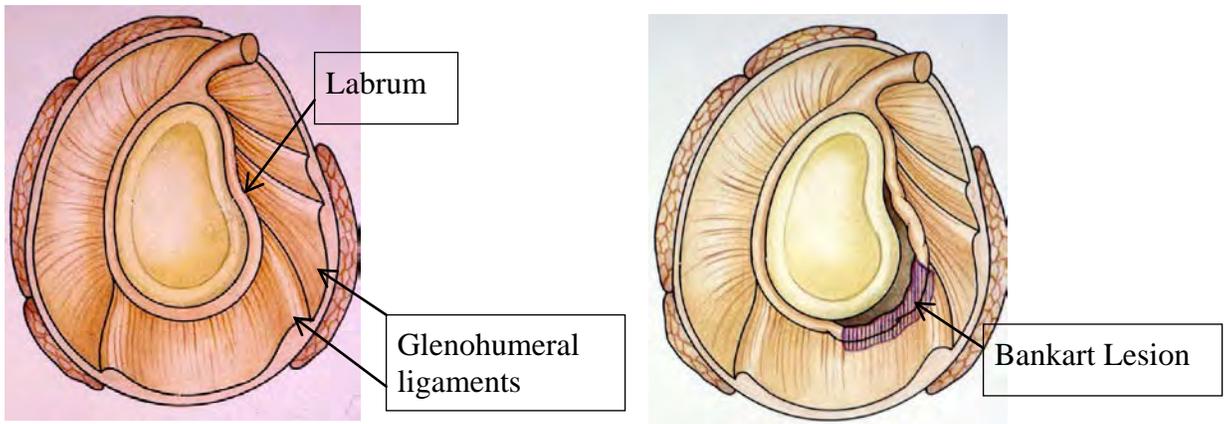
Soft tissues include muscles, tendons, and ligaments. These connect the shoulder bones together, provide stability, and movement to the joint.

- The capsule is a sheet of tough fibers that encloses the joint. The glenohumeral ligaments are thickened parts of the capsule that connect the humerus to the labrum. The labrum is firmly attached to the rim of the glenoid. The capsule, ligaments, and labrum provide most of the stability to the shoulder joint.
- The Rotator Cuff is a group of muscles & tendons that lie deep in the shoulder. It consists of 4 muscle/tendon units: supraspinatus, infraspinatus, subscapularis, and teres minor. The Rotator Cuff connects the arm bone (humerus) and the shoulder blade (scapula) and is critical for enabling normal shoulder function.
- The bursa is a sac that cushions the rotator cuff
- The coracoacromial ligament connects the acromion to the coracoid.



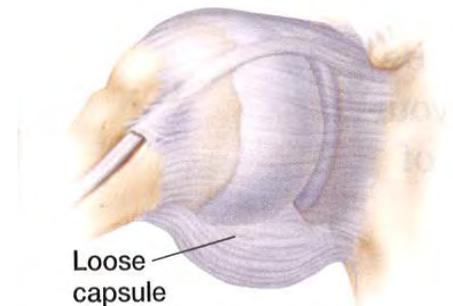
## **Shoulder Instability**

Injury is the leading cause of shoulder instability. A shoulder dislocation or subluxation (partial dislocation) can occur when the arm is forced or twisted into an awkward position. With a significant force on the shoulder joint, the glenohumeral ligaments can stretch or tear. Commonly, the injury will also result in a tear of the labrum. The location of the labrum tear is dependent on the direction of the force to the shoulder. Commonly, the lower part of the labrum will tear (Bankart lesion). Once the labrum is torn, it usually does not heal.



The ligaments can also be stretched by repetitive motions such as throwing. Once the capsule is stretched, it remains loose. This can make the joint feel as if it is slipping out of place. Symptoms of instability often occur when the arm is placed in certain positions, such as reaching behind you. Symptoms include:

- Apprehension, or the feeling your shoulder is going to pop out of place.
- Pain, especially with overhead activities
- A catching, locking, popping, or grinding sensation
- Weakness or stiffness



## **Treatment**

Non-surgical treatments can sometimes reduce shoulder instability symptoms. Treatments include physical therapy, anti-inflammatory medication, and activity modification. If these treatments are not effective, arthroscopic surgery can be beneficial.

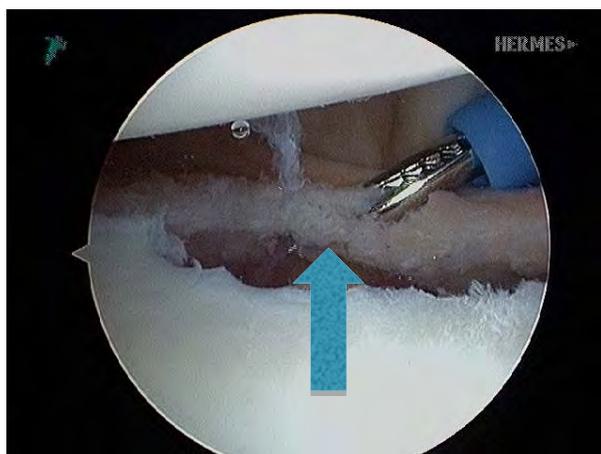
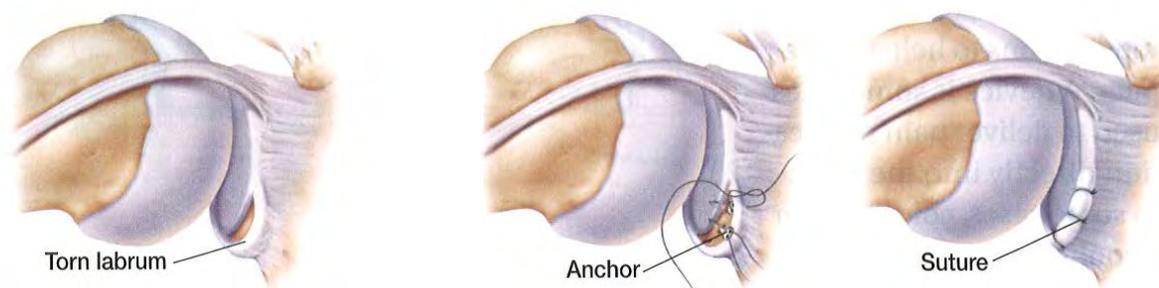
## **Arthroscopic Surgery**

Arthroscopy allows a surgeon to see and work inside your shoulder joint through small incisions. A long, thin, lighted instrument called an arthroscope is used. During surgery, the arthroscope sends live video images from inside the joint to a monitor. Using these images, the doctor can diagnose and treat your shoulder problem. Because arthroscopy uses such small incisions, recovery is often shorter and less painful than recovery after open surgery.

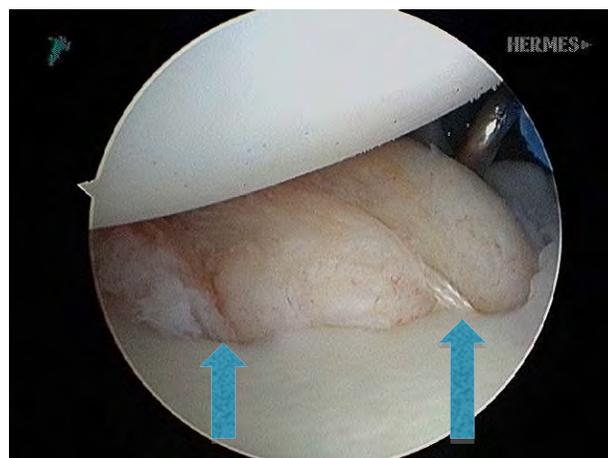
During surgery, the torn labrum can be trimmed or repaired. A torn labrum is repaired by reattaching it to the glenoid. This is often done with special devices called suture anchors. The anchors are inserted into small drill holes in the glenoid. The suture that is attached to the

anchor is used to sew the labrum in place. When the repaired labrum heals, the pain is usually relieved & the joint feels more stable.

## Torn Labrum

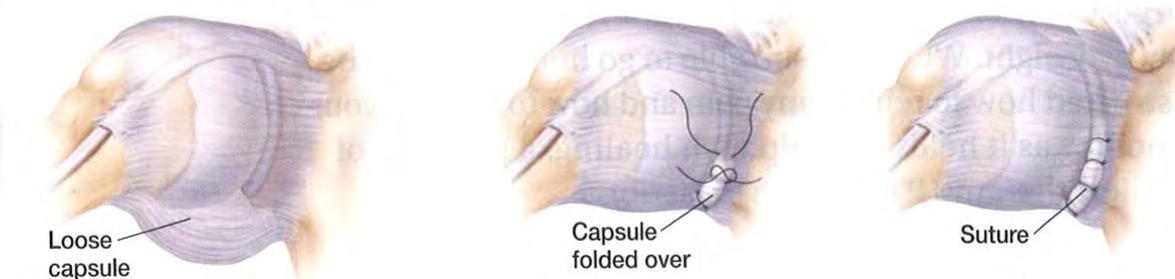


Torn Labrum

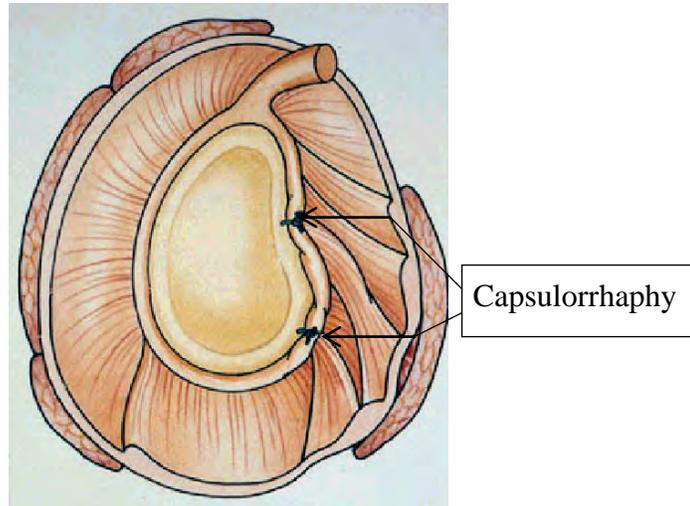


Labral Repair

## Stretched Capsule



A stretched capsule can be 'tightened' by folding it over on itself and sutured in place. This is called a capsulorrhaphy. This tightens the capsule, helping make the shoulder joint more stable. This can be performed as an arthroscopic procedure and can be performed in addition to a labral repair, when indicated.



## **Risks**

There are risks with any surgery. Risks and complications are rare, but include: infection, damage to nerves or blood vessels, blood clots, pulmonary embolism, medical complications, swelling, stiffness, continuing shoulder problems, recurrent instability, etc.

## **Before Surgery**

You need to prepare ahead of time for shoulder surgery.

- Stop taking anti-inflammatory medication, including aspirin, before the surgery, if directed.
- Tell your doctor about any prescription or over-the-counter medications, herbs, or supplements that you take. Ask whether you should stop taking these before surgery.
- You will be called by a company to provide you an automated ice delivery system. This is usually not covered by your insurance. It is an excellent way to reduce pain and swelling, and is much more convenient than an ice pack. We highly recommend that you arrange for this icing method.
- Don't eat or drink anything after midnight the night before surgery. This includes water.
- Arrange for a friend or family member to give you a ride home.

## **After Surgery**

After your arthroscopic surgery, you will recover in the hospital or surgery center for a few hours. When you are able to go home, you will be instructed how to relieve any pain and how to care for your shoulder as it heals. To help with healing, a program of physical therapy (PT) will be prescribed.

## **In the Recovery Room**

After surgery you will be taken to a recovery area to rest. You'll have a bandage to protect your incisions, and a sling to hold your arm in place. Nurses will give you medications to help relieve the pain. Cool packs or a cooling unit maybe used to reduce swelling and pain in your shoulder.

## **Going Home**

Before leaving the hospital or surgery center, be sure to know how to care for your shoulder at home. Ask any questions you may have. Also know who to contact if you have questions later.

When you are ready to leave the hospital or surgery center, an adult family member or friend will drive you home.

## **Post-op Instructions**

- Wear your sling as directed. A sling is required for about 4-6 weeks post-op.
- Pain medication will be prescribed; it will be available for pick up at the pharmacy listed on your surgical letter. Take the pain medication as directed. Do not wait for the pain to get bad before you take it.
- Ice your shoulder 3 times a day for 20 minutes at a time. Use the Game Ready machine (if given one) or a bag of ice or frozen peas. Put a thin cloth between your skin and the ice source.
- You should attend physical therapy 2 days post-op. The physical therapist will teach you a home exercise program. Formal physical therapy will begin 3 weeks post-op.
- You are able to shower 2 days after surgery. Let the soap and water run over the incisions; do not scrub them. Dry the incisions with a clean towel or gauze pad. Cover the incisions with bandaids. Do not apply ointment, of any kind, to your incisions.
- Bruising and swelling of the shoulder, arm, and hand are common. Bleeding from the bone and other soft tissues deep to the skin cause this. Bruising and swelling usually resolve in the first few weeks following surgery.
- **It is illegal to operate a motor vehicle while using narcotic pain medication or wearing a sling.**
- It is common to develop a stiff neck following surgery. This may be caused by the sling and immobilization of your arm. Ensure that the sling is well padded and frequently move your neck in slow circles.
- Follow up one week after surgery to have your stitches removed and to discuss your surgical procedure.
- As discussed, the recovery for a labral repair is about 6 months.

**You should contact your physician if you are having shortness of breath, redness around your incisions, discharge from your incisions, or a fever greater than 101.5°F**