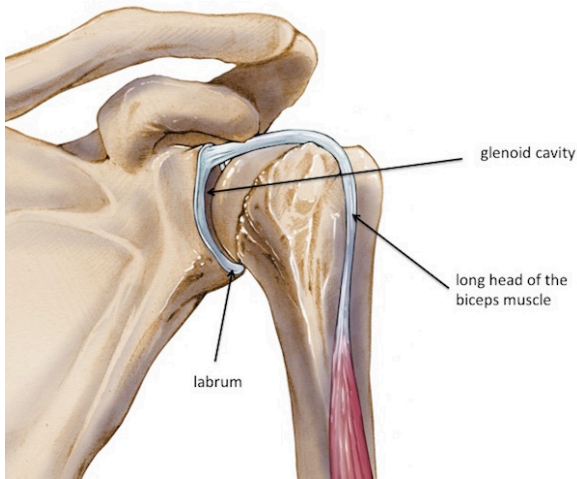


DR. TODD KIM

-Orthopedic Surgery-

Shoulder Labral Tears



What is the shoulder labrum?

The labrum is a cup-shaped rim of cartilage that lines and reinforces the ball-and-socket joint of the shoulder. The shoulder joint is composed of the glenoid (the shallow shoulder “socket”) and the head of the upper arm bone known as the humerus (the “ball”).

The labrum is the attachment site for the shoulder ligaments and supports the ball-and-socket joint as well as the rotator cuff tendons and muscles. It contributes to shoulder stability and, when torn, can lead to partial or complete shoulder dislocation.

There are different types of tears.

What are the types of labral tears?

SLAP Tear: SLAP stands for “superior labrum from anterior to posterior.” This type of tear occurs at the front of the upper arm where the biceps tendon connects to the shoulder. Patients with SLAP tears may experience pain at the front of the shoulder near the biceps tendon.

Bankart Tear: Bankart tears typically occur in younger patients who have dislocated their shoulder. When the shoulder joint ball slips out of the socket, the joint capsule (fibrous tissues that surround and protect the joint) can pull on the lower portion of the labrum and tear it. This in turn creates instability because the breached labrum makes it easier for the shoulder to dislocate again. A dislocation where the head of the humerus shifts toward the

front of the body, it leads to what is called “anterior instability.” When the ball slips toward the back of the body, it leads to “posterior instability.”

With Bankart tears, patients may feel apprehension that the shoulder may slip out of place or dislocate in certain positions.

Posterior Labral Tear: This is less common, but some patients get a tear in the posterior part of the labrum. This can lead to chronic pain and if not improved with conservative treatment can require surgical repair. These tears are typically not well seen on MRI, and sometimes are only confirmed at the time of surgery.

Degenerative Labral Tear: Very commonly, as patients get less young, they can develop tears of the labrum with the normal wear and tear in the life of a shoulder joint. This is the earliest stage of a worn out joint, but does not necessarily mean that the joint will progress to advanced arthritis. These are most common at the superior and posterior labrum. In cases where these tears cause pain that does not respond to conservative measures, surgical repair can be necessary.

Symptoms and Causes

What are the causes of a shoulder labral tear?

There are several main causes of Shoulder Labral Tears: injury, overuse and degeneration.

Slap Tears

At any point in time, 25% of adults will deal with shoulder pain due to injury or overuse. Superior Labrum, Anterior to Posterior tears (SLAP tears), also known as labrum tears, represent 4% to 8% of all shoulder injuries

SLAP tears can be caused by falling onto an outstretched hand, quickly lifting a heavy object or from a forceful, overhead arm motion. A SLAP tear often causes pain at the front of the shoulder near the biceps tendon.

SLAP tears are frequently experienced by athletes of sports that involve overhead throwing, such as tennis, baseball, football and javelin or shotput.

SLAP tears have three causes:

- **Chronic Injury:** Slap tears can happen over time in people who play sports or do exercise that requires lots of overhead motion. Playing baseball or softball, swimming or lifting weights are common causes for SLAP tears. Chronic injury is the most common cause of a SLAP tear.
- **Acute injury:** SLAP tears can happen if you try to block a fall with your outstretched arm or you use abrupt jerking movements to lift heavy objects.
- **Aging.** Slap tears can simply happen as your labrum wears out over time. This tear is usually seen in people age 40 and older.

Bankart Tears

A dislocated shoulder that causes a Bankart tear can occur during sports activity or trauma, such as a fall.

Bankart tears are usually experienced by younger patients, typically in their twenties. Labral tears caused by trauma, such as falling down a flight of stairs, are especially common among older adults, since cartilage becomes more brittle with age.

Common symptoms include dull or aching pain in the shoulder and difficulty performing normal shoulder movements. Instability caused by a Bankart lesion may lead to frequent shoulder dislocations.

What are the symptoms of a shoulder labral tear?

Slap Tear

Common SLAP tear symptoms include:

- Shoulder pain that can be persistent dull ache or a sharp pain deep in your shoulder.
- Shoulder pain in certain positions, like raising your arm or stretching your arm behind your head.
- Shoulder pain when you do certain things, like throwing a ball or reaching overhead.
- Popping noises or a grinding feeling when you move your shoulder.
- A feeling like your shoulder might pop out of your shoulder blade.

Bankart Tear

- **Pain.** When reaching overhead, at night, or with daily activities...
- Instability and weakness. The shoulder may “just hang there,” pop out of the joint, or feel too loose.
- Limited range of motion...
- Unusual noises or sensations in the shoulder

Diagnosis and Tests

How is a shoulder labral tear diagnosed?

Physical Examination & Patient History: During your first visit, Dr. Kim will talk to you about your symptoms and medical history. During the physical examination, Dr. Kim will check all the structures of your injury and compare them to your non-injured anatomy. Most injuries can be diagnosed with a thorough physical examination.

Imaging and Testing: Dr. Kim may utilize to confirm your diagnosis include:

X-rays: Although they will not show any injury, x-rays can show whether the injury is associated with a broken bone.

Magnetic resonance imaging (MRI) scan: If your injury requires an MRI, this study is utilized to create a better image of soft tissues injuries. However, an MRI may not be required for your particular injury circumstance and will be ordered based on a thorough examination by your Peninsula Bone & Joint Clinic Orthopedic physician.

Management and Treatment

What is the treatment for a shoulder labral tear?

Nonsurgical options

If you have a labral tear and you keep using it despite increasing pain, you may cause further damage. Early treatment can prevent your symptoms from getting worse. It will also get you

back to your normal routine that much quicker.

The goal of any treatment is to reduce pain and restore function. There are several treatment options for a labral tear, and the best option is different for every person. In planning your treatment, Dr. Kim will consider your age, activity level, general health, and the type of tear you have.

There is no evidence of better results from surgery performed near the time of injury versus later on. For this reason, many doctors first recommend nonsurgical management tears.

In about 50% of patients, nonsurgical treatment relieves pain and improves function in the shoulder. Shoulder strength, however, does not usually improve without surgery.

Nonsurgical treatment options may include:

- **Rest.** Your doctor may suggest rest and limiting overhead activities. He or she may also prescribe a sling to help protect your shoulder and keep it still.
- **Activity modification.** Avoid activities that cause shoulder pain.
- **Non-steroidal anti-inflammatory medication.** Drugs like ibuprofen and naproxen reduce pain and swelling.
- **Strengthening exercises and physical therapy.** Specific exercises will restore movement and strengthen your shoulder. Your exercise program will include stretches to improve flexibility and range of motion. Strengthening the muscles that support your shoulder can relieve pain and prevent further injury.
- **Steroid injection.** If rest, medications, and physical therapy do not relieve your pain, an injection of a local anesthetic and a cortisone preparation may be helpful. Cortisone is a very effective anti-inflammatory medicine.

The chief advantage of nonsurgical treatment is that it avoids the major risks of surgery, such as:

- Infection
- Permanent stiffness
- Anesthesia complications
- Sometimes lengthy recovery time

The disadvantages of nonsurgical treatment are:

- No improvements in strength

- Size of tear may increase over time
- Activities may need to be limited

Surgical treatment may include:

Dr. Kim may recommend surgery if your pain does not improve with nonsurgical methods. Continued pain is the main indication for surgery.

If you are very active and use your arms for overhead work or sports, Dr. Kim may also suggest surgery.

Other signs that surgery may be a good option for you include:

- Your symptoms have lasted 6 to 12 months.
- You have a large tear (more than 3 cm)
- You have significant weakness and loss of function in your shoulder. Your tear was caused by a recent, acute injury

What are the different types of surgery

Debridement

Debridement **involves removing loose fragments of tendon, thickened bursa, and other debris from around the shoulder joint.** By clearing damaged tissue from the region of the shoulder joint, it helps the doctor to see the extent of the injury and determine whether you need more surgery.

Debridement can also involve **shaving the frayed edges of a stable tear** and can be done if the labrum is attached to the socket but the tear is away from the attachment site. The surgery is done as an outpatient procedure allowing patients to go home the same day.

Arthroscopic Labral Surgery

The surgical technique most commonly used for treating a SLAP injury is arthroscopy. During arthroscopy, your surgeon inserts a small camera, called an arthroscope, into your shoulder joint. The camera displays pictures on a video monitor, and your surgeon uses these images to guide miniature surgical instruments.

Small surgical instruments are placed through the other incisions to define and mobilize the torn labrum. Future anchors are then inserts to reattach the labrum to the glenoid and tension the attached ligaments. The incision are then closed and covered with a bandage.

Biceps Tenodesis

Biceps tenodesis surgery treats injuries that happen when you tear or damage the tendon that connects your biceps muscle to your shoulder. This type of tendon damage may be called biceps tendonitis.

The biceps tenodesis procedure treats shoulder and biceps muscle pain and weakness that happens when you tear your long head biceps tendon. This tendon is located at the top of your bicep muscle. It's connected to your labrum, which is cartilage that lines your shoulder socket.

In the biceps tenodesis procedure, Dr. Kim releases your torn biceps tendon from your labrum. In some instances, Dr. Kim relocates your biceps tendon to your upper arm bone (humerus). Dr. Kim can fix your biceps tendon with open surgery or arthroscopic surgery.

What happens after SLAP or Bankart surgery?

- You'll wear an arm sling so your injured shoulder isn't bearing weight. You might need to wear the sling for several weeks to several months.
- Your shoulder might feel stiff.
- Your shoulder might feel weak.
- You still might have limited range of motion.
- Dr. Kim might recommend light exercise or physical therapy to help you regain strength.