LABRAL TEARS

What is the labrum?

The shoulder complex is made up of three bones, which are connected by muscles, ligaments, and tendons. The large bone in the upper arm is called the humerus. The shoulder blade is called the scapula and collarbone is called the clavicle.

The top of the humerus is shaped like a ball. This ball sits in a socket on the end of the scapula. The ball is called the head of the humerus and the socket is called the glenoid fossa, hence the term "glenohumeral" joint. The glenoid fossa has a rim of tissue around it called the glenoid labrum. The glenoid labrum makes the glenoid fossa deeper and improves the stability of the glenohumeral joint, which is the most mobile joint in the body. It also serves as an attachment of the biceps tendon into the shoulder.

What is a labral tear and what causes them?

When the glenoid labrum becomes injured or torn, it is described as a labral tear. These tears may be classified by the position of the tear in relation to the glenoid which is often called the "shoulder socket". A Bankart lesion is a tear in the labrum located in the front, lower (anterior, inferior) part of the shoulder socket. This type of tear occurs most commonly during a shoulder dislocation. A Bankart lesion makes the shoulder more prone to recurrent dislocations.

A SLAP tear is a tear in the labrum that covers the top part of the shoulder socket from front to back (Superior Labral tear from Anterior to Posterior). A SLAP tear occurs at the point where the long head of biceps tendon attaches. This type of tear occurs most commonly during falls on an outstretched arm.

A labral tear may also develop gradually for a variety of reasons. Some of the risk factors include:

- Repetitive movements that create excessive motion at the glenohumeral joint such as throwing, swimming, and other overhead activities.
- Activities that require the biceps muscles to contract sharply against the labrum such as heavy weightlifting, pitching or playing golf.
- Repeated lifting and carrying of heavy objects commonly seen in military personnel when required to carry heavy packs

What does a labral tear feel like?

The symptoms of a labral tear may include a clicking or catching sensation in the shoulder during certain movements and/or a vague pain in the front or top of the shoulder. In some cases a labral tear may not cause any pain. Labral tears as a result of shoulder dislocations can convey a sense of instability or weakness in the shoulder.
Can a labral tear be detected on X-rays?

X-rays can rule out chips, cracks or other problems with bones but they cannot identify soft tissue injuries like labral tears. MRI arthrograms are very effective in identifying labral tears. The "gold" standard for identifying a labral tear is through arthroscopic surgery of the shoulder.

What is the treatment for a labral tear?

A lot can be done to help people who have a labral tear. Most times, treatment will begin with a non-operative approach. A program of stretching and strengthening exercises, icing, anti-inflammatory medications may be used to help decrease pain and improve function of the shoulder. A physical therapist is used to help develop a proper treatment program. Cortisone injections can be used liberally in the treatment of many labral tears.

If the non-operative methods are not effective, surgery may be required. Your shoulder specialist is able to repair or remove the torn part of the labrum through arthroscopic surgery. If the labral tear is also associated with an unstable glenohumeral joint, your shoulder specialist can also surgically stabilize the glenohumeral joint.

Adapted with permission from Santa Monica Orthopaedic Group Tom Knapp, M.D.