

Labral Tears

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Introduction

Since orthopedic surgeons began using a tiny TV camera called an arthroscope to diagnose and treat shoulder problems, they have discovered several conditions that no one knew existed. One of these conditions is an injury to a small structure in the shoulder called the labrum. A labral tear can cause pain and a catching sensation in the shoulder. Labral tears can be very difficult to diagnose.

This document will help you understand:

- where and what the labrum is
- what tests your doctor will run to diagnose the problem
- what you can do to relieve your pain

Anatomy

What is the labrum?

The shoulder is made up of three bones: the scapula (shoulder blade), the humerus (upper arm bone), and the clavicle (collarbone).

A part of the scapula, called the glenoid, makes up the socket of the shoulder. The glenoid is very shallow and flat. The labrum is a rim of soft tissue that makes the socket more like a cup. The labrum turns the flat surface of the glenoid into a deeper socket that molds to fit the head of the humerus.

The rotator cuff connects the humerus to the scapula. The rotator cuff is formed by the tendons of four muscles: the supraspinatus, infraspinatus, teres minor, and subscapularis.

Tendons attach muscles to bones. Muscles move the bones by pulling on the tendons. The rotator cuff helps raise and rotate the arm. As the arm is raised, the rotator cuff also keeps the humerus tightly in the glenoid of the scapula.

The soft labral tissue can be caught between the glenoid and the humerus. When this happens, the labrum may start to tear. If the tear gets worse, it may become a flap of tissue that can move in and out of the joint, getting caught between the head of the humerus and the glenoid. The flap can cause pain and catching when you move your shoulder. Several tendons and ligaments attach to the labrum that help maintain the stability of the shoulder. So when the labrum tears, the shoulder often becomes much less stable.

Related Document: [A Patient's Guide to Shoulder Anatomy](#)

Causes

What causes labral tears?

Labral tears are often caused by a direct injury to the shoulder, such as falling on an outstretched hand. The labrum can also become torn from the wear and tear of activity, a condition called overuse. An injured labrum can lead to shoulder instability. The extra motion of the humerus within the socket causes additional damage to the labrum. An extremely unstable shoulder may slip or dislocate. This can also cause the labrum to tear.

Related Document: [A Patient's Guide to Shoulder Instability](#)

The biceps tendon attaches to the front part of the labrum. The biceps is the large muscle on the front of your upper arm. Sports can cause injuries to the labrum when the biceps tendon pulls sharply against the front of the labrum. Baseball pitchers are prone to labral tears because the action of throwing causes the biceps tendon to pull strongly against the top part of the labrum. Weightlifters can have similar problems when pressing weights overhead. Golfers may tear their labrum if their club strikes the ground during the golf swing.

Related Document: [A Patient's Guide to Biceps Tendonitis](#)

Symptoms

What does a labral tear feel like?

The main symptom caused by a labral tear is a sharp pop or catching sensation in the shoulder during certain shoulder movements. This may be followed by a vague aching for several hours. At other times, the tear may not cause any pain. Shoulder instability from a damaged labrum may cause the shoulder to feel loose, as though it slips with certain movements.

Diagnosis

What tests will my doctor run?

Your doctor may suspect a labral tear based on your medical history. You will be asked questions about your pain and past injuries to your shoulder that may suggest labral damage.

In the physical examination, there are several shoulder movements that can bring on the symptoms. You may feel a catching sensation as your arm is raised, and there may be pain when the arm is held overhead. If your arm is held in front of your body, with the palm of the hand facing downward, you may feel pain when your doctor tries to push down on your arm.

Labral tears are difficult to see, even in a magnetic resonance imaging (MRI) scan. An MRI scan is a special imaging test that uses magnetic waves to show the tissues of the shoulder in slices. The MRI scan shows soft tissues such as tendons and ligaments as well as bones.

Your doctor will probably have a physical or occupational therapist direct your rehabilitation program. Your first therapy treatments will try to ease pain and inflammation by using such treatments as heat or ice. Hands-on treatment and various types of exercises are used to improve the range of motion in your shoulder and the nearby joints and muscles.

Later, you will do strengthening exercises to improve the strength and control of the rotator cuff and shoulder blade muscles. Your therapist will help you retrain these muscles to keep the ball of the humerus in the glenoid. This will improve the stability of your shoulder and help it move smoothly during all your activities.

You may need therapy treatments for four to six weeks. Most patients are able to get back to their activities with full use of their arm within this amount of time.