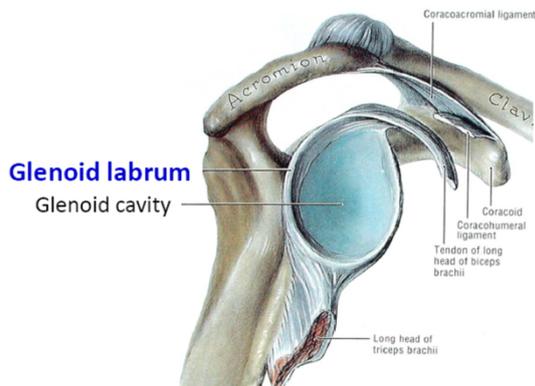


# Labral Tears

The shoulder is a ball and socket joint, but the socket (glenoid) is very shallow. There is a lip of soft tissue around the edge of the socket called the labrum (Latin for 'lip'). The labrum deepens the socket and ligaments attach to it. At the top of the socket one of the biceps tendons (the long head of biceps) attaches to the labrum.



If we look at the socket (glenoid) like a clock, the biceps attaches around the 12 o'clock position. This region is quite variable in its anatomy and appearance. In around 50% of people there is a smooth edge to the labrum in this location, but in others there can be a natural fold or 'meniscal' shape. This can make it hard to call on an MRI or even at surgery, whether a small tear is present or if there is a natural fold. The acronym "SLAP" (superior labral anterior posterior) tear is applied to tears of the superior labrum.

The anterosuperior labrum, between 12 o'clock and 3 o'clock also has a wide variation in normal anatomical appearances. Injury to the anterosuperior labrum is not a common cause of significant symptoms.

The anteroinferior labrum from 3 o'clock around to 6 o'clock is an important part of the labrum and is involved in providing stability to the shoulder. The anteroinferior labrum is commonly torn in anterior dislocations of the shoulder.

The posterior labrum (6 o'clock to 12 o'clock) is less well developed than the anterior labrum, but can be a cause of symptoms when injured. In any region of a labral tear, a cyst sometimes develops (paralateral cyst) where fluid passes through the labral tear to form a cyst. These cysts may be a source of pain. Occasionally they may cause weakness if they are causing pressure on nearby nerves.

## How Do You Get a Labral Tear?

Labral tears may be caused by injury or be a normal finding in middle age and beyond. In a study of asymptomatic volunteers between ages of 45-60, more than 50% had MRI reported superior labral tears.

Traumatic causes include shoulder dislocation, collision/impact injuries and wrenching injuries.

## How Do You Diagnose a Labral Tear?

In young patients with a significant traumatic labral tear, usually there are significant symptoms. Symptoms may include pain, clicking, a feeling of weakness and sometimes instability. Physical examination is helpful but non specific. Labral tears would not commonly be expected to cause severe pain or widespread severe tenderness to touch around the shoulder. The imaging to diagnose a labral tear is an MRI arthrogram. As already noted, some labral changes may commonly be reported on an MRI scan in the general population, with increasing age, without symptoms. The clinical and imaging findings need to be interpreted together to determine what is likely significant.

## Treatment of Labral Tears

The clearest indications for surgical treatment of labral tears include MRI proven tears in the context of:

- Recurrent instability of the shoulder (dislocation)
- Labral tears with paralateral cysts causing nerve pressure
- "Bucket handle" labral tears or tears with large flaps that cause mechanical catching in the joint

If these features are not present, a trial of non surgical treatment may be worthwhile. These include:

- "Rest" and activity modification – may be more than 6 months
- Physiotherapy – core strengthening, scapular stability, kinetic chain rehab
- Sport specific technical adjustments eg serving or throwing technique
- Occasionally glenohumeral cortisone injection to settle inflammation

## Labral Repair Surgery

- General anaesthetic
- Usually 1 night in hospital
- Arthroscopic repair with sutures and suture anchors
- Sling post operatively, often around 4 weeks
- Physiotherapy guided rehabilitation as per guidelines (see labral repair info sheet)