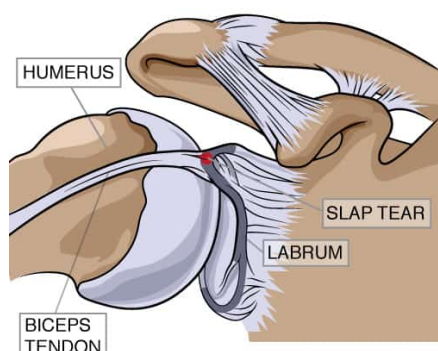
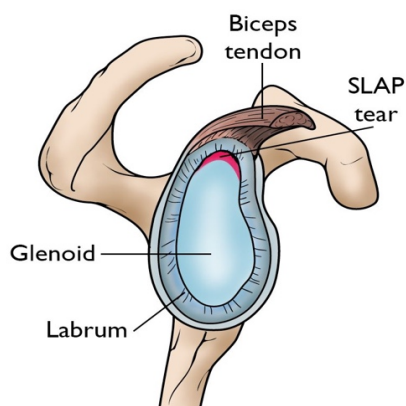


## SLAP (Superior Labrum) Tears

Your shoulder is a ball-and-socket joint made up of three bones: your upper arm bone (humerus), your shoulder blade (scapula), and your collarbone (clavicle). The head of your upper arm bone fits into a rounded socket in your shoulder blade. This socket is called the glenoid. The labrum is a lip like piece of cartilage that deepens the socket of the shoulder joint and functions to help stabilize the shoulder. Many ligaments and the biceps tendon attach to the labrum.



A SLAP tear is a tear to the top or superior part of the labrum where the biceps tendon attaches. It is often seen on MRI imaging but is not always the cause of pain.



### Causes

Injuries to the superior labrum can be caused by acute trauma or by repetitive shoulder motion. An acute SLAP injury may result from:

- A motor vehicle accident
- A fall onto an outstretched arm
- Forceful pulling on the arm, such as when trying to catch a heavy object
- Rapid or forceful movement of the arm when it is above the level of the shoulder
- Shoulder dislocation

People who participate in repetitive overhead sports, such as throwing athletes or weightlifters, can experience labrum tears as a result of repeated shoulder motion.

Many SLAP tears, however, are the result of a wearing down of the labrum that occurs slowly over time. In patients over 30 to 40 years of age, tearing or fraying of the superior labrum can be seen as a normal process of aging. This differs from an acute injury in a younger person.

## Symptoms

- A sensation of locking, popping, catching, or grinding
- Pain with movement of the shoulder or with holding the shoulder in specific positions
- Pain with lifting, throwing or hitting objects, especially overhead
- Decrease in shoulder strength and movement
- A feeling that the shoulder is going to "pop out of joint"
- Decreased range of motion
- Throwing athletes may notice a decrease in their throw velocity, or the feeling of having a "dead arm" after pitching

## Diagnosis

A SLAP tear is often detected on physical examination. An MRI scan is the best method for identifying a SLAP tear

## Treatment

### Nonsurgical Treatment

In most cases, the initial treatment for a SLAP injury is nonsurgical and includes:

- Medications such as anti-inflammatories
- Physiotherapy to restore movement and strength and to focus on range-of motion and stretching
- Can take 6 months to see improvement

### Surgical Treatment

The surgical treatment is aimed at improving symptoms. In certain tears and patients, it is appropriate to try to repair the SLAP tear, but in other patients it is better to remove the biceps that attaches to the labrum from the shoulder. This can either involve cutting the tendon, tenotomy, or reattaching the tendon, tenodesis.

## Complications

Some of these can be serious and can even cause death.

### General complications of any operation

General complications of any shoulder surgery

- **Pain** levels felt after surgery vary depending on the type of surgery, individual pain thresholds, nature of the problem for which surgery was done and various other factors. Pain beyond 2-3 months may indicate ongoing inflammation which may need injections to help improve.
- **Stiffness** after shoulder surgery is common and occurs as a result of preexisting pathology, surgical scarring and prolonged post-operative protection in a sling. Most stiffness improves by 6 months, however some patients may require injections or further procedures to help the stiffness.
- **Bleeding** during or after surgery is very uncommon, occurring in less than 1% of patients. It is common to have oozing from the arthroscopic wound ports after surgery as the blood-stained sterile water used during surgery drains out.
- **Infection** of the surgical wound is rare with arthroscopic surgery. Early diagnosis of post-operative infection has a significantly better outcome compared to delayed diagnosis. After your operation, you should contact the rooms immediately if you get a temperature, become unwell, notice pus in your wound, or if your wound becomes red, sore or painful.
- **Unsightly scarring** of the skin is uncommon and most surgical scars have disappeared to a thin pale line by one year after surgery. If you are concerned about your scar please discuss treatments to improve scar healing.
- **Nerve injury** is rare (less than 0.5%) with most shoulder operations, but some larger operations have a higher risk and this will be discussed with you by your surgeon.
- **Vascular injury** is very rare (less than 0.5%) after shoulder surgery.
- **Anaesthetic related** complications such as sickness and nausea are relatively common. Heart attacks, lung infections and neurological problems such as strokes are rare, occurring at less than 1 person in 1,000, but have been reported to occur.

## Specific complications of this operation

### SLAP Repair

- Stiffness and pain are more common after SLAP repairs than a lot of other arthroscopic procedures. These usually get better with time, but some patients will require injections or further procedures to help.
- Failure of the repair to heal can also occur. If this happens, a second procedure which involves a biceps tenodesis is usually recommended.
- Development of arthritis can occur in any damage to the glenoid/socket of the shoulder, this can also occur in SLAP tears.

### Tenodesis/Reattachment

- Involves a cut further down the arm, and this can get infected.
- Higher risk of damage to nerves in the region of the cut, this may affect sensation, pain and function around the arm.
- The repair may stretch or fail, leading to similar complications seen in tenotomy.
- Fracture/break of the humerus/arm bone can occur through the area of biceps repair. This is rare in the surgical procedure Mr Mattern uses.

### Tenotomy/Release

Biceps complications such as cramping, fatigue and weakness are uncommon but can occur.

Cosmetic deformity in the form of the 'Popeye' deformity often occurs.

Function and pain relief is often good after surgery.

### How soon will I recover?

You should be able to go home the same day or the next morning. It can take up to a year to get back enough strength in your shoulder to return to normal activities.

Regular exercise should help you to return to normal activities as soon as possible.

Before you start exercising, ask for advice. You may not get back the same strength that you had before you damaged your shoulder.

## SLAP (Superior Labral Antero-Posterior) Repair

	Rehabilitation
<b>Day 1-3 Weeks</b>	<ul style="list-style-type: none"> <li>• Sling for up to 3 weeks</li> <li>• Advice on sling management</li> <li>• Active assisted ROM exercises</li> <li>• Progress to active assisted closed chain exercises as tolerated</li> <li>• Ensure dynamic scapula and cuff control</li> <li>• Light proprioceptive exercises (limit weight bearing)</li> <li>• Early kinetic chain rehabilitation affected arm excluded</li> <li>• Thoracic spine ROM</li> <li>• Neck, elbow, wrist &amp; hand exercises</li> </ul>
<b>3-6 Weeks</b>	<ul style="list-style-type: none"> <li>• Sling discarded</li> <li>• Progress to active ROM as able</li> <li>• Begin strengthening</li> <li>• Capsular stretches as required (depending on fixation site)</li> <li>• Progress proprioceptive exercises</li> <li>• Ensure dynamic scapula and cuff control through range</li> <li>• Progress kinetic chain rehabilitation (short lever/closed chain) and facilitate functional movement patterns</li> </ul>
<b>6 Weeks +</b>	<ul style="list-style-type: none"> <li>• Work to eliminate any capsular stiffness</li> <li>• Progress strengthening/increase resistance through range</li> <li>• Full kinetic chain rehabilitation</li> </ul>

<b>Sling</b>	Sling <3 weeks
<b>Physiotherapy Follow Up</b>	Within 2 weeks post op

Milestones	
<b>Week 3</b>	Can return to driving as comfortable, light lifting, sedentary work as comfortable
<b>Week 6</b>	Full active ROM, driving, swimming (all strokes), golf, manual work from 6 weeks (no heavy lifting).
<b>Week 12</b>	Full active ROM, full strength, return to contact sports, return to heavy lifting.

Patient Specific Instructions/Requirements