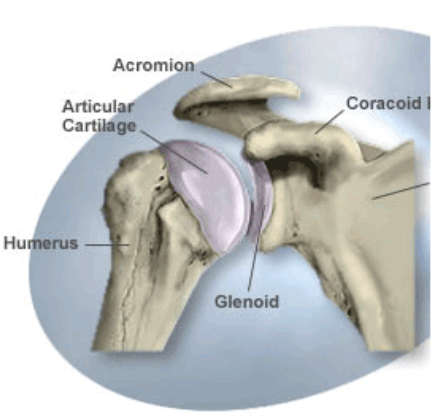
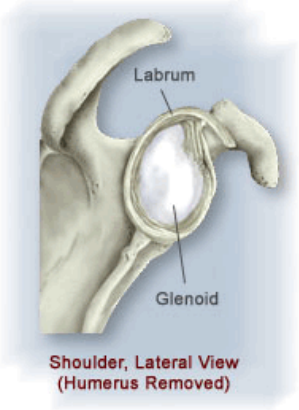
Slap tear

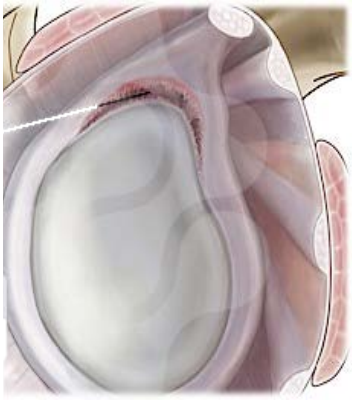
A SLAP tear is an injury to a part of the shoulder joint called the labrum. The ball of the shoulder joint sits against its shallow socket (glenoid) like a golf ball on a golf tee. This arrangement allows for a huge range of movement in the shoulder, but is inherently unstable – imagine what happens to the ball when you tip the golf tee on its side. To compensate for the shallow socket, the shoulder joint has a cuff of cartilage called a labrum that deepens the socket. The biceps tendon is attached to the superior part of the labrum.

Injuries to the top of the labrum are called called SLAP tears, an acronym for Superior Labrum from Anterior to Posterior. The superior labrum can be injured in sudden forceful shoulder movements, for example catching yourself when falling from a ladder. Repetitive overhead activity, such as baseball pitching or swimming can also result in tearing of the superior labrum. In many cases however, the labral tearing is a result of gradual deterioration, without injury or excessive overhead activity.



Normal superior labrum





SLAP tear

What are the symptoms of a SLAP tear?

Typical symptoms of a SLAP tear include a catching or popping sensation and pain with shoulder movements, most often during overhead activities such as throwing. Pain is usually felt deep within the shoulder or in the back of the shoulder joint. It is often hard to pinpoint symptoms, unless the biceps tendon is also involved. There may be a feeling of instability.

How is a slap tear diagnosed?

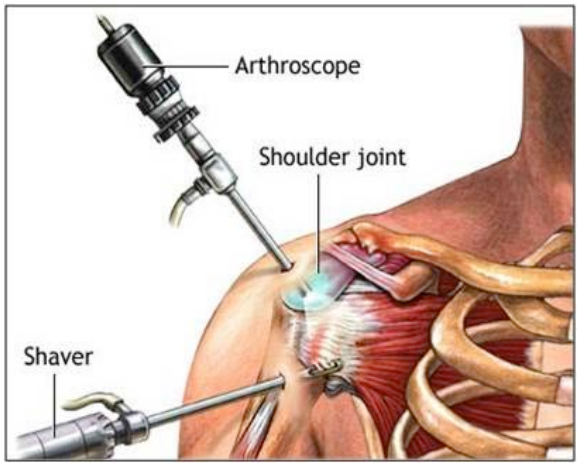
While there are no absolutely specific tests for a SLAP tear, some parts of the physical examination will point towards the diagnosis. X-rays are routinely performed, and MRI scanning is the best non-invasive investigation, although it is not perfect either. Sometimes, the only way to diagnose a SLAP tear is through arthroscopic examination of the shoulder.

How is a SLAP lesion treated?

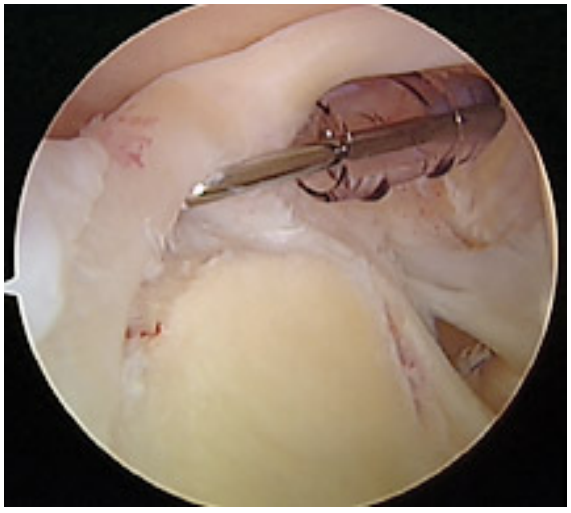
Usually the initial treatment for a SLAP lesion is nonsurgical. This includes activity modification, analgaesia and a rehabilitation program. Rehabilitation focuses on shoulder flexibility and strength. For overhead throwing athletes and swimmers, technique assessment and modification may also be required. A program may require three months or more to be effective.

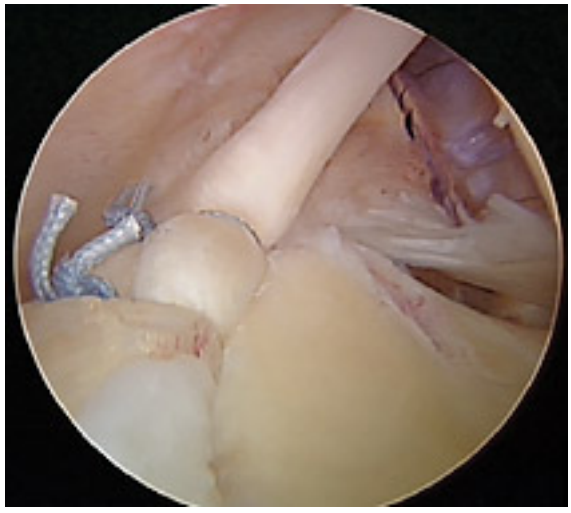
Surgical treatment

Surgery is useful for patients who have ongoing symptoms or functional limitations that have not adequately improved with non-operative treatment. This is usually performed under a general anaesthetic by arthroscopy (keyhole surgery).
Several small puncture holes are made in the shoulder and the joint is thoroughly inspected using a arthroscope attached to a camera. Other instruments are then introduced. The torn labrum and attachment of the biceps tendon are then either trimmed away or repaired with sutures secured into the bone.



Surgery is usually performed as an outpatient, where you go home the same day. A sling is worn, and a careful rehabilitation process then follows. You will wear a sling for the first 4 weeks after surgery and gradually increase strength and mobility exercises.


Torn superior labrum


Repaired SLAP tear

When can I return to work or sport?

Usually you can return to sedentary work after 1-2 weeks. Light work, not involving lifting or overhead work can be started after about 6 weeks. It may take 6 months or more to be able to return to heavy overhead manual work.
Athletes may commence a controlled throwing program or return to contact sports after 4-6 months or so depending on the tear pattern and progress of the rehabilitation.

What are the risks of surgery?

All surgical procedures have some element of risk attached. The likelihood of a life-threatening surgical complication, or damage to major blood vessels or nerves is very rare and unusual. The procedure does require a general anaesthetic, with the associated risks and concerns. The anaesthetist will discuss these risks with you.

The most common and important risks of arthroscopic shoulder surgery and SLAP repair that have been reported are:

Stiffness: <5%
The shoulder will occasionally become stiff after surgery. This is most commonly in patients with diabetes or previous shoulder stiffness. Physiotherapy and stretching is usually sufficient to treat this problem. Rarely the shoulder can require surgery to release scar tissue and improve movement.

Ongoing symptoms or failure to return to overhead sports at same level: ~10%
Athletes or those engaged in high-demand overhead activity have the greatest demand on a fully functioning labrum. Even the best results in the literature do not guarantee successful return to these activities.

Nerve damage or bleeding: less than 0.5%
The axillary nerve runs close to the bottom of the joint and, if damaged causes weakness of the deltoid muscle and difficulty in raising the arm.

Infection: less than 0.5%
This is usually superficial in the wounds and is easily treated with antibiotics
Rarely the infection can be deep inside the joint and this requires surgery to wash the joint out.