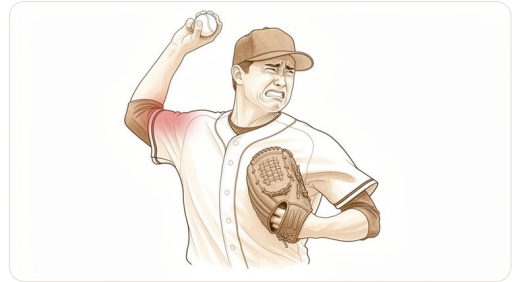


SLAP and Biceps Pathology



SLAP and biceps-anchor problems often cause deep shoulder pain during overhead throwing and other overhead activity.

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What you're feeling

You may feel pain in the front of your shoulder. This pain often sits deep inside the joint. It can also travel down your upper arm. Many people describe it as a dull ache that turns sharp with movement. You might notice the pain gets worse when you lift your arm above your head. Reaching for items on high shelves can become difficult. Throwing a ball or playing racquet sports may trigger sharp discomfort.

Your shoulder may feel unstable or like it might give way. Some patients report a catching or locking sensation. This happens when the torn tissue gets caught in the joint. You might hear a clicking or popping sound when you move your arm. These symptoms often mimic other shoulder problems. Your pain could feel like rotator cuff inflammation or general instability. It is common to feel stiffness, especially in the morning.

Daily tasks become challenging when you need to use both hands. Reaching behind your back to fasten a bra can be painful. Tucking in a shirt requires awkward twisting that aggravates the tear. Sleeping on the affected side is often impossible due to pressure and pain. You may wake up frequently because of the discomfort.

The pain typically flares after activity. It may linger into the evening or keep you awake at night. Rest usually helps reduce the immediate sharp pain, but stiffness returns with inactivity. You might find yourself avoiding using your arm to protect it. This can lead to weakness over time.

It is important to know that physical exam tests alone cannot confirm this diagnosis. Your surgeon will look at your history and imaging to understand what you are feeling. If you have calcification in the biceps tendon, it may be linked to this tear. Understanding your specific symptoms helps your surgeon choose the right path for you. Whether you need repair or a tenodesis (relocating the tendon), the goal is to relieve this pain and restore function.

What's actually happening

Your shoulder is a ball-and-socket joint. The socket is lined with a ring of cartilage called the labrum. Think of this ring as a gasket or shock absorber. It keeps the ball centered and stable. The biceps tendon attaches to the top of this ring. It acts like a rope that helps lift your arm.

A SLAP tear means this attachment has pulled away or torn. The word SLAP stands for Superior Labrum Anterior to Posterior. This describes the location and direction of the tear. It happens at the top of the socket.

This injury can feel like many different problems. It often mimics impingement or rotator cuff issues. It can also feel like shoulder instability. This makes it tricky to diagnose. Sometimes, it is hard to tell exactly what is wrong just by looking at your symptoms.

When this tear happens, your shoulder mechanics change. The ball may slide too much in the socket. This extra movement puts more stress on the biceps tendon. It also increases pressure inside the joint. Over time, this extra load can wear down the joint surfaces.

Your body tries to cope with this instability. Your muscles may fire at different times than usual. For example, a muscle called the serratus anterior might activate earlier. This is likely a protective strategy to stabilize your shoulder blade and joint. However, this change in timing can feel awkward or weak.

These changes explain your pain and limited motion. The tear disrupts the smooth gliding of the joint. The biceps tendon gets pulled or strained during movement. This causes sharp pain, especially when lifting or reaching overhead. It can also cause a catching sensation.

Understanding this helps your surgeon choose the right fix. For some patients, repairing the labrum is best. For others, moving the biceps tendon attachment (tenodesis) works better. This decision depends on your age, activity level, and specific tear type. Your surgeon will guide you to the option that restores stability and reduces pain.

What we can do about it

Your surgeon will first recommend non-operative treatment with an appropriate regimen. This approach provides satisfactory clinical outcomes in middle-aged patients with symptomatic SLAP lesions. You should consider this step before recommending operative treatment. The goal is to reduce pain and restore movement through targeted exercises. A clinical prediction model can help predict the failure of this management with moderate accuracy, based on your specific symptoms and prior treatments. However, a decision to operate should not be made on the basis of clinical assessment tests alone. You must also consider your pain levels, overhead activity level, and how you have responded to prior non-operative management.

If pain persists, medical management may include pain medication or anti-inflammatories. In some cases, your surgeon may consider injections such as cortisone, hyaluronic acid, or PRP. These options aim to reduce inflammation and provide temporary relief. If calcific tendinitis of the long head of the biceps brachii at its origin is suspected, it may be helpful to consider the presence of a concurrent SLAP lesion and its management. Note that high prevalence of superior labral tears diagnosed by MRI in middle-aged patients with

asymptomatic shoulders emphasizes the need for supporting clinical judgment when making treatment decisions. Do not rely on imaging alone; your surgeon will correlate findings with your physical symptoms.

When conservative care has reached its limit, surgery is considered. This is often driven by the presence of pain and your desire to return to activity. For patients under the age of 30 years with a symptomatic isolated SLAP tear, open subpectoral biceps tenodesis may be a reliable alternative to arthroscopic repair. Primary biceps tenodesis provides improved functional results in active patients under 30 when compared to SLAP repair at minimum 2 year follow-up. It is also a safe, effective, and technically straightforward alternative to primary SLAP repair in patients with type II and IV SLAP tears. In a young active population, biceps tenodesis may facilitate earlier return to activity compared to repair. For failed type II SLAP repair, subpectoral biceps tenodesis as a salvage procedure demonstrates improved results. The decision is ultimately made individually with the patient, weighing specific advantages and disadvantages.

What to expect

Your shoulder will likely feel better after surgery, but the path to full function takes time. Most patients see a significant drop in pain and a clear improvement in how well their shoulder works. You can expect your surgeon to discuss whether biceps tenodesis or SLAP repair is the right choice for you. This decision depends on your age, activity level, and the specific nature of your tear.

For active patients under 30, biceps tenodesis often provides better functional results than SLAP repair. In this procedure, your surgeon moves the biceps tendon to a new spot in the upper arm bone. This approach is safe, effective, and predictable. It is also a reliable option if you have had a previous SLAP repair that did not heal properly. Even if your initial surgery failed, this correction can restore function and reduce pain.

If you are a competitive overhead athlete, your outlook is generally positive. About 81% of patients return to their previous level of play after subpectoral biceps tenodesis. This return typically happens at an average of 4.1 months postoperatively. You can expect high satisfaction and good outcomes if you are carefully selected for the procedure. Female patients also show comparable results to male patients in terms of pain relief, function, and ability to return to sports after a minimum two-year follow-up.

If you choose not to have surgery, or if you are older than 40, the trend in treatment is shifting. There has been a decline in SLAP repairs and an increase in biceps tenodesis for patients over 40. While some people manage without surgery, others may face persistent pain or limited function. Risk factors for needing revision surgery include being over 40, female sex, obesity, smoking, or having biceps tendinitis.

Overall, the outlook is encouraging. Whether you are young and active or middle-aged, modern techniques offer reliable ways to manage your symptoms. Your surgeon will help you weigh the benefits of early return to activity against the healing time required. With proper care, most patients regain the use of their shoulder and return to the activities they love.

When to see someone

Ask for a specialist review if you have persistent shoulder pain that does not improve with rest. Seek care if you notice weakness, instability, or if your shoulder locks or gives way. See your GP if symptoms interfere with your sleep or work. Sudden worsening of pain is also a reason to seek help. Be aware that SLAP lesions can mimic other issues like impingement or rotator cuff problems. A diagnosis should not rely on clinical tests alone. If calcific tendinitis is suspected, your surgeon will check for a concurrent SLAP lesion. Early assessment helps determine if procedures like biceps tenodesis are appropriate for your specific injury.