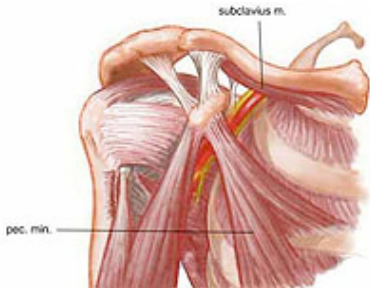


Bone and Joint Specialists

IMPINGEMENT SYNDROME, BURSITIS, ROTATOR CUFF TENDONITIS



What is impingement?

Impingement syndrome is a fancy word for "pinching" of the rotator cuff muscles in the shoulder. The muscles get pinched between two bones (the humeral head and the acromion process) and this causes inflammation.

Inflammation will lead to more pinching and that is when you get pain. The pain is usually felt on the outside of the shoulder or arm area and can radiate

to the elbow or into the neck. I usually see impingement in patients over the age of 30 and very rarely in the younger patient. Anyone can get it from sedentary patients to athletes. Reaching overhead or use of the arm in certain directions makes the pain worse. Popping or snapping in the shoulder may be felt with movement. As the impingement syndrome progresses the rotator cuff muscles weaken and may subsequently tear. This is one of the ways you can tear the rotator cuff muscles.

What are the causes of impingement?

There are multiple causes, but the most common is a bone spur or a tight ligament. These structures are usually the culprits for all of your pain. They are the ones which cause the inflammation in the rotator cuff. For something so small they can sure cause a lot of sleepless nights and overall discomfort.

What can you do about impingement?

Since a majority of the patients with impingement (and no rotator cuff tear) get better with conservative management, this is my initial approach to your painful shoulder. This consists of physical therapy, oral anti-inflammatory medicine and/or the use of a local anti-inflammatory injection into the shoulder. My goal is to decrease the swelling or inflammation in the rotator cuff so that it will not get "pinched". With less inflammation, you will have less pain. As the inflammation decreases, you will also have less damage to your rotator cuff tendons.

For a minority of patients, surgery will need to be performed to remove the offending agent (typically a bone spur) and take the pressure off of the rotator cuff. This procedure is done with an arthroscope through small incisions. An arthroscope is a small camera we use to view into small spaces. The surgery is done as same day procedure.

What can I expect from treatment?

Every person is different and it is imperative to get the proper diagnosis so that you can start on the appropriate therapy, medicine and/or have the correct surgical procedure. The results are excellent in a great majority of the patients. Underlying medical conditions can increase the likelihood of complications we may encounter along the way.



SLAP Tears of the Biceps Tendon

What is a SLAP tear?

SLAP tears are tears of the biceps attachment in the top of the shoulder. The biceps attaches in the joint above the socket. The actual tendon will become either partially or fully detached off of the bone. These tears can be seen with impingement, rotator cuff tears, instability and shoulder arthritis. SLAP is an acronym for Superior Labral tear Anterior to Posterior.

How do you know if you have a SLAP tear?

SLAP tears are difficult to diagnose. There are specific mechanisms which can put the biceps tendon at risk. Having the arm jerked forward during a car accident or having the arm pulled forcefully up or back (during a fall) can put enough tension on the tendon that it pulls it off the bone and causes the tear. There are some physical examination test which can be done, but they are not very good at picking up these tears. MRI's done with contrast (arthrograms) are helpful at picking up these SLAP tears. I use the mechanism, exam and radiological studies together to help diagnose these biceps detachment injuries.

What do you do for SLAP tears?

Most SLAP tears are asymptomatic and folks function without any shoulder pain or loss of motion from them. If the tear is symptomatic the options are medicine, injections or surgery. Physical therapy has not been proven to help SLAP tears. That does not mean that the therapist cannot help the other issues / problems that are also bothering your shoulder at the same time. I could have put the SLAP tear section with any of the shoulder issues below since they are seen with multiple other problems.

What are the surgical options for SLAP tears?

If the tear stays symptomatic and the other treatment options have failed, then one may need surgery. In most patients, a good option is to repair the torn tissue or do a SLAP repair. If the tendon attachment is very damaged or if the patient is above 60 years old, then doing a biceps tenodesis is recommended. Having said that, everyone is different and every tear behaves in its own peculiar fashion. What may work surgically for one patients may not be the best operation for the next one. These options can be addressed with you in greater detail during the preoperative visit.



What is the natural progression of a torn tendon?

Physical therapy is designed to help the torn tissues/scar heal in a more normal fashion. If this happens in your shoulder the tear could close up if it is a small partial tear. As this happens the pain in your shoulder will get better and eventually go away. If you have a full-thickness tear, this is most often repaired arthroscopically.

I did my therapy, took my medicine and I am still having pain. What is next?

If you do end up having to have a rotator cuff repair with surgery, relax. The rotator cuff tendon used to be repaired with a large incision in the front of the shoulder. This gave us access to the torn tendon for direct repair. New advances in arthroscopic rotator cuff repair enable us to use very small incisions through which small instruments are passed to suture the torn tendon. The small incisions give you less swelling, pain and tissue bleeding which translate to an easier rehabilitation for you and your shoulder.

Can all rotator cuff tears be fixed?

There are some tears that are so big and/or the tissue is so poor in quality that a rotator cuff repair will not be helpful. This is why it is important to get the proper treatment on your shoulder before it deteriorates. The status of the tear can be determined by your exam and by an MRI. These patients usually have very poor range of motion in their shoulder and have moderate amount of pain and discomfort. They will also have "wasting" and weakness of the rotator cuff muscles on exam. Depending on your age, tear size, pain level and presence of other muscles around the shoulder, you may be a good candidate for a procedure which will eliminate your pain and improve your motion. If you think you may fit into this category, ask me if you are a candidate for a "reverse prosthesis" when you come and see me in clinic.

How do I rehabilitate my shoulder after surgery?

I have specific postoperative rehab protocols which we will use depending on the size of the repaired tear. I work with the best physical therapists in Austin and the surrounding area. Having a good therapist is imperative for good post-operative success. Let us find the right therapist for you.

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Bone and Joint Specialists

FROZEN SHOULDER or ADHESIVE CAPSULITIS



What is a frozen shoulder?

This is a term we use to describe the tightening of the innermost ligaments in the shoulder. The ligaments get very tight and contracted. Think of it as putting on a really tight shirt and trying to move your shoulder around. The textbooks state that it happens without a cause, but it is more common in diabetics, patients with thyroid problems and in other medical conditions. It is important to be aware of this so that we can possibly diagnose an underlying condition you may not even know you have. It affects women and men equally. I tend to see it in patients in their fifth and sixth decades of life. It can be common in women who are experiencing menopause. The patients usually

present with a painful and stiff shoulder. Movement of the shoulder hurts. Most of the patients have usually been to see a therapist and have not improved.

What is the treatment for a frozen shoulder?

Treatment is done with medication to decrease the inflammation in the shoulder and with physical therapy. The normal course is for the shoulder to initially get very painful and stiff and over time loosen up. Without proper treatment, this can take a year to a year and a half to improve. With the proper treatment one can greatly reduce the time with this painful condition. Over 90% of the patients do very well with conservative treatment. Those who do not respond favorably may be candidates for a surgical release of the tight ligaments. This is done in the operating room. I can either break up the contractures manually with a gentle manipulation, or it can be done with an arthroscope. Each individual is different so check with me if you have specific questions.

It will be very important for you to start physical therapy right after the scar tissue has been released. I begin therapy the day after the procedure and continue it for at least 6 weeks. I have specific postoperative rehab protocols which we will use. I work with the best physical therapists in Austin and the surrounding area. Having a good therapist is imperative for good post-operative success. Let us find the right therapist for you.

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Bone and Joint Specialists

SHOULDER DISLOCATIONS



What do you mean by shoulder instability?

In this condition, the capsule and ligaments are too loose and they do not keep the ball of the humerus in the joint. This is the opposite problem we see in someone with adhesive capsulitis (described in the previous section). When the shoulder comes out of the joint and dislocates we call this instability. One can get instability from multiple causes, but the most common one is trauma. Falling on your

outstretched arm can cause the humeral head or "ball" to come out of the "socket" and tearing of the ligaments.

What happens when a shoulder dislocates?

There are multiple soft tissue and bony structures which keep your shoulder in the socket. When you dislocate your shoulder, some of the ligaments inside the shoulder tear and/or get stretched out. You can also tear your rotator cuff muscle when you dislocate your shoulder. Less commonly you can also sustain fractures of the bones or injure the cartilage. It is important to keep this in mind, because I may have to treat your shoulder differently if you have a concomitant tear in your rotator cuff muscle and you are dislocating.

What can be done about a shoulder that dislocates?

If your shoulder is dislocated you will need immediate medical attention to place it back into the joint. Once it is reset, immobilization in a sling is recommended. You will need to be immobilized for about 3 weeks. After this period you will start physical therapy. Your rate of recurrence (having this happen again) will depend on your activity level. An 18 year old avid water skier has an 80-95% rate of recurrence, whereas a 50 year old lawyer has only about a 20% rate of re-dislocation. At the end of the 3 weeks of immobilization we will start with the therapy to get your range of motion and your strength back.

What is conservative treatment for the shoulder that dislocates?

After your immobilization in a sling, you will need to start to regain your motion and your strength. This is done with physical therapy. As stated earlier, the rate of recurrence depends on how you were immobilized, your age and activity level and the degree of other injuries your shoulder sustained during your dislocation(s).

My shoulder keeps on popping out, what's next?

If you have rehabilitated your shoulder appropriately and it continues to dislocate, you may be a candidate for surgery. Surgery is similar to the rotator cuff repairs. You can use an open (large) incision to manually repair the torn or stretched out tissue. I prefer to use an arthroscope through small incisions to repair the damage. New advances in the technique and arthroscopic instruments have made this a very successful surgery.



Bone and Joint Specialists

How do I rehabilitate my shoulder after surgery?

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ACROMIOCLAVICULAR (AC) JOINT DISLOCATION



What is the AC joint?

The AC joint is where the acromion process and the clavicle meet and form a joint. See the anatomy section in the website. It is a small joint, but commonly sprained in car accidents, bicycling and in contact sports. There are several ligaments surrounding the joint and depending on the severity of your injury you may have torn one or all of the ligaments.

What are the different injuries one can get around the AC joint?

The ligaments can either partially tear or fully tear around the AC joint. When you fully tear the ligaments the clavicle "rides" up and is seen / felt higher at the top of the shoulder. You can also fracture the outer part of the clavicle and/or the acromion process and this may also look like the clavicle is riding up. Luckily, most of the injuries are mild ligament strains and not full fledged tears causing the upward displacement of the clavicle.

What is the treatment for the AC joint injuries?

Proper diagnosis is imperative. With this we can tailor your therapy accordingly. A large majority of the patients do great with a sling for comfort and early range of motion with physical therapy. There are some fractures and or ligament injuries that need to have surgical intervention. Again, these patients are the minority, but the goal is the same and that is to get you back to your pre-injury state.

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Bone and Joint Specialists

ARTHRITIS IN THE SHOULDER



What is arthritis?

Arthritis happens to us when the cartilage in our joints wears out or gets destroyed from diseases / trauma. The cartilage is what our joints glide on and when this wears out and becomes rough you begin to get pain from one bone rubbing directly on the other bone in the joint. As the arthritis worsens and the cartilage wear continues the joint becomes worn out and becomes slightly deformed. You can

get arthritis in joints from multiple causes. The most common one is primary osteoarthritis, which means you get it because it runs in your genes. One can also get arthritis from inflammatory diseases such as rheumatoid arthritis or from infections in your joints such as septic arthritis. Trauma to the joints can also cause injury to the cartilage, which can lead to arthritis as well. This kind of arthritis is called traumatic arthritis.

What happens when you get arthritis in the shoulder?

There are two areas in the shoulder where you can get arthritis, the glenohumeral joint and the AC joint (See the anatomy section in the website.). Arthritis in the glenohumeral joint affects the shoulder the most and will give you pain and loss of range of motion. As the arthritis worsens the shoulder motion will get stiffer and stiffer. Arthritis in the AC joint will also cause pain, but this will usually not affect the overall shoulder motion.

What is the natural progression of an arthritic joint?

As the joint gets more arthritic, you will begin to lose motion and you will develop more pain. Arthritic joints become flat and deformed instead of being smooth round structures. As the deformity changes the joint you will lose range of motion and as the cartilage wears out your bones will begin to rub together. This is the part that hurts.

How do you treat arthritis in the shoulder?

Management of arthritis can be complex. Diet and conditioning can help arthritic joints as well as medication. As the arthritic process progresses and the oral medications seem to lose their effect, I can inject medication into the joint to lessen the inflammation and decrease pain. Physical therapy is less effective in the arthritic setting than in problems like rotator cuff tears, but it may help your shoulder. If the arthritic process continues to worsen and you have failed conservative therapy, you may be a good candidate for an operative procedure. This can be a simple same day surgical procedure done with an arthroscope or a little more involved procedure such as a shoulder replacement. This will obviously depend on the type of arthritis you have and how far along it has progressed.

What can I expect from treatment?

Every person is different and it is imperative to get the proper diagnosis so that you can start on the proper therapy, medicine and/or have the correct surgical procedure. The results are excellent in a great majority of the patients.



What do you do in a shoulder replacement?

Just as in replacement surgery in the knee and hip, shoulder replacement takes away the painful arthritic cartilage and replaces it with smooth metal and plastic components. These glide easily and since they do not have pain fibers on the prosthesis you get pain relief from your new joint. There are over 150,000 total joint procedures done each year.

I have shoulder arthritis, but my doctor cannot perform a replacement because I have a large rotator cuff tear. What can be done for this?

In patients with massive rotator cuff tears or in revision surgery, total shoulder replacement or hemiarthroplasty (half of a replacement) will not give you good results. The FDA has just approved the use of a new prosthesis for use here in the U.S. It is called the "reversed prosthesis" and it has been used in Europe now for over 15 years with good clinical results for this problem.

Why is it called a "reversed prosthesis"?

This prosthesis places the ball on the socket side of the joint and the socket on the ball part of the joint. Compare the picture in this section to that in the "News and Events" section.

When do you use this prosthesis?

The indications for this prosthesis are glenohumeral arthritis with massive, irreparable rotator cuff tears. It can also be used for revision shoulder replacements with massive rotator cuff tears. These patients are usually very limited with their shoulder function and have very poor range of motion and strength.

How does it work?

To simplify things, it balances the shoulder muscles with the new prosthesis. It provides better motion and strength in your shoulder even with torn rotator cuff muscles... The design of the prosthesis allows the deltoid muscle to have improved power and thus lift the arm and give you back most of the lost motion and strength.

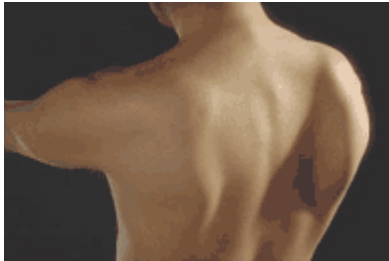
For more information on the reversed prosthesis please see the "News and Events" section.

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Bone and Joint Specialists

Scapular Dyskenesis or winging of the scapula



What is a winging scapula?

Scapular winging or dyskenesis occurs from either a muscle imbalance in the shoulder blade area or from a nerve injury which controls those muscles. The rotator cuff muscles all attach onto the scapula and then send the tendons to the humeral head or the top of the arm bone. These tendons help to rotate the arm. If the scapula is winging, it will cause the rotator cuff muscles to work in a different way that they should and cause them to get

irritated. This can then lead to rotator cuff tendon problems. See the section above on the rotator cuff.

What can one do for a dyskenetic scapula?

If the scapula is winging from muscle weakness, then the only way to treat the problem is with therapy. I must stress that rotator cuff strengthening exercises will not make your scapular muscles better. The therapy has to be directed for the specific muscle(s) which are dysfunctional.

Is there any surgery that can fix this problem?

Unless your scapular problem is from a nerve injury, there is no surgical procedure that can be done to correct the winging. Therapy is the only option, but as mentioned above, one has to have the right type of physical therapy and not just rotator cuff strengthening exercises (this is very important).

Can I wear a brace to make this better?

There is a brace that may be prescribed for you, but the best thing is to go to therapy and do your exercises as instructed by your therapist. A brace can help one get their muscles back in shape, but it will not correct the problem by itself.

Do you ever see any other shoulder problems associated with scapular winging?

Yes, many of the patients with rotator cuff tears and with shoulder instability have some scapular dyskenesis. It is important in these cases to not only treat the tear or the instability, but also the scapula. In patients with lax ligaments who have shoulder instability, scapular dyskenesis can exacerbate the shoulder looseness. Scapular dyskenesis can also make rotator cuff problems worse.