

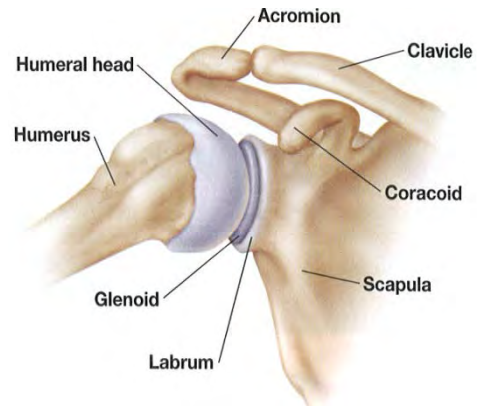
Impingement Syndrome

The shoulder is your body's most flexible joint. It is designed to let the arm move in almost any direction. But this flexibility has a price, making the joint prone to injury. The shoulder is made up of bones, muscles, ligaments, and tendons. They work together so you can comfortably reach, swing, lift, and throw a ball. Learning about the parts of the shoulder will help you understand your shoulder problem.

Anatomy

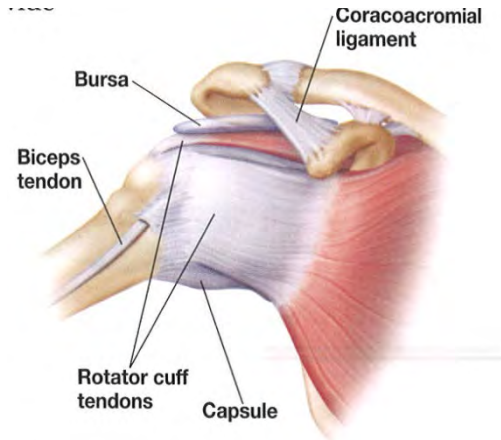
Bones provide the foundation of the shoulder joint. The bones fit together in a way that allows the arm to move freely.

- The humeral head is the ball at the top of the humerus (arm bone).
- The glenoid is the shallow socket located on the scapula (shoulder blade).
- The labrum is a ring of cartilage around the rim of the glenoid. Important ligaments attach to the labrum and connect to the humerus. The labrum and these ligaments provide stability to the shoulder joint.
- The coracoid and acromion are two other parts of the scapula. Muscles attach on these structures.
- The clavicle is the collar bone. The clavicle connects to the acromion, forming the acromioclavicular (AC) joint.



Soft tissues include muscles, tendons, and ligaments. These connect the shoulder bones together, provide stability, and movement to the joint.

- The capsule is a sheet of tough fibers that encloses the joint. The ligaments are thickened parts of the capsule that connect the humerus to the labrum. The labrum is firmly attached to the rim of the glenoid. The capsule, ligaments, and labrum provide most of the stability to the shoulder joint.
- The Rotator Cuff is a group of muscles & tendons that lie deep in the shoulder. It consists of 4 muscle/tendon units: supraspinatus, infraspinatus, subscapularis, and teres minor. The Rotator Cuff connects the arm bone (humerus) and the shoulder blade (scapula) and is critical for enabling normal shoulder function.
- The bursa is a sac that cushions the rotator cuff
- The coracoacromial ligament connects the acromion to the coracoid.



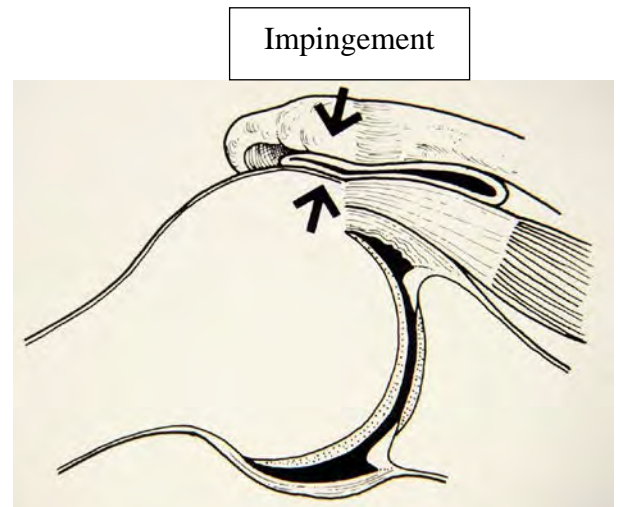
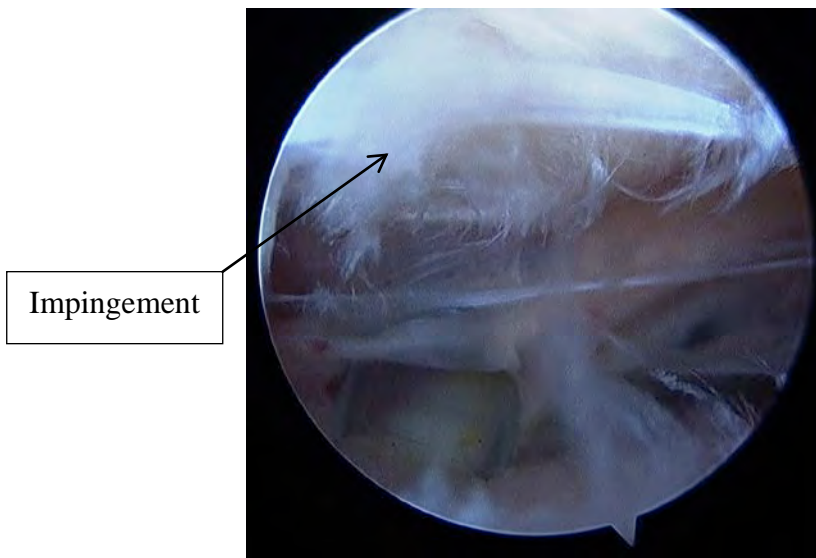
Rotator Cuff Impingement

Rotator cuff problems often develop slowly overtime. The rotator cuff tendons often weaken (degenerate) with age & use. This makes them vulnerable to inflammation or tearing. You may not notice a problem until it causes pain.

Repetitive use can irritate the rotator cuff tendons and the overlying bursa. This may be due to pinching of the rotator cuff and bursa on the overlying acromion (Impingement). The body responds by sending more blood to the irritated areas which causes swelling. As swelling gets worse several problems can develop, including bursitis (inflammation of the bursa) and tendinitis (inflammation of the tendons).

The rotator cuff can tear gradually, due to age or overuse, or as a result of a sudden injury. Rotator cuff tears can be partial-thickness tears (incomplete tear or thinning of the rotator cuff) or full-thickness tears (complete detachment from the humerus).

Rotator cuff impingement and rotator cuff tears can cause pain, weakness, and loss of normal shoulder motion.



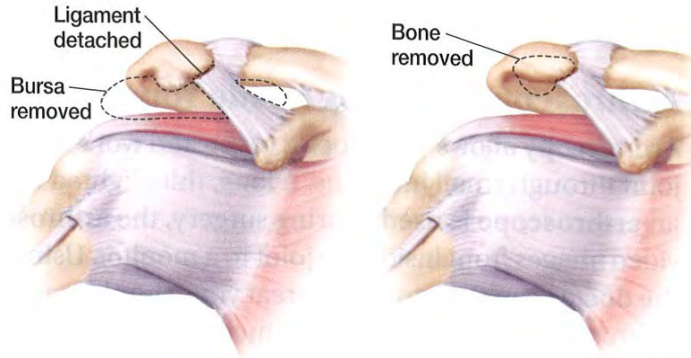
Treatment Options

For many people non-surgical treatments will relieve shoulder rotator cuff symptoms. Non-surgical treatments include physical therapy, anti-inflammatory medication, and cortisone injection. If these treatments are not effective, arthroscopic surgery can be beneficial.

Arthroscopic Surgery

Arthroscopy allows a surgeon to see and work inside your shoulder joint through small incisions. A long, thin, lighted instrument called an arthroscope is used. During surgery, the arthroscope sends live video images from inside the joint to a monitor. Using these images, the doctor can diagnose and treat your shoulder problem. Because arthroscopy uses such small incisions, recovery is often shorter and less painful than recovery after open surgery.

During surgery, the thickened bursa may be trimmed and pinching bone spurs may be removed. When necessary, the rotator cuff tendons can be reattached to the humerus. This is done with sutures and/or suture anchors.



Risks

There are risks with any surgery. Risks and complications are rare, but include: infection, damage to nerves or blood vessels, blood clots, pulmonary embolism, medical complications, swelling, stiffness, continuing shoulder problems, etc.

Before Surgery

You need to prepare ahead of time for shoulder surgery.

- Stop taking anti-inflammatory medication, including aspirin, before the surgery, if directed.
- Tell your doctor about any prescription or over-the-counter medications, herbs, or supplements that you take. Ask whether you should stop taking these before surgery.
- You will be called by a company to provide you an automated ice delivery system. This is usually not covered by your insurance. It is an excellent way to reduce pain and swelling, and is much more convenient than an ice pack. We highly recommend that you arrange for this icing method.
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- Don't eat or drink anything after midnight the night before surgery. This includes water.
- Arrange for a friend or family member to give you a ride home.

After Surgery

After your arthroscopic surgery, you will recover in the hospital or surgery center for a few hours. When you are able to go home, you will be instructed how to relieve any pain and how to care for your shoulder as it heals. To help with healing, a program of physical therapy (PT) will be prescribed.

In the Recovery Room

After surgery you will be taken to a recovery area to rest. You'll have a bandage to protect your incisions, and a sling to hold your arm in place. Nurses will give you medications to help relieve the pain. Cool packs or a cooling unit may be used to reduce swelling and pain in your shoulder.

Going Home

Before leaving the hospital or surgery center, be sure to know how to care for your shoulder at home. Ask any questions you may have. Also know who to contact if you have questions later. When you are ready to leave the hospital or surgery center, an adult family member or friend must drive you home.

Post-op Instructions

- A sling is provided for pain relief. It can be removed as pain allows, unless otherwise instructed.
- Pain medication will be prescribed; it will be available for pick up at the pharmacy listed on your surgical letter. Take the pain medication as directed. Do not wait for the pain to get bad before you take it.
- Ice your shoulder 3 times a day for 20 minutes at a time. Use the Game Ready machine (if given one) or a bag of ice or frozen peas. Put a thin cloth between your skin and the ice source.
- You should attend physical therapy 2 days post-op.
- You are able to shower 2 days after surgery. Let the soap and water run over the incisions; do not scrub them. Dry the incisions with a clean towel or gauze pad. Cover the incisions with bandaids. Do not apply ointment, of any kind, to your incisions.
- Bruising and swelling of the shoulder, arm, and hand are common. Bleeding from the bone and other soft tissues deep to the skin cause this. Bruising and swelling usually resolve in the first few weeks following surgery.
- **It is illegal to operate a motor vehicle while using narcotic pain medication or wearing a sling.**
- It is common to develop a stiff neck following surgery. This may be caused by the sling and immobilization of your arm. Ensure that the sling is well padded and frequently move your neck in slow circles.
- Follow up one week after surgery to have your stitches removed and to discuss your surgical procedure.

You should contact your physician if you are having shortness of breath, redness around your incisions, discharge from your incisions, or a fever greater than 101.5°F