

Shoulder Pain

What Causes Shoulder Pain?

The shoulder is a ball and socket joint with a large range of movement. Such a mobile joint tends to be more susceptible to injury. Shoulder pain can stem from one or more of the following causes.

- Strains from overexertion
- Tendonitis from overuse
- Shoulder joint instability
- Dislocation
- Collar or upper arm bone fracture
- Frozen shoulder
- Pinched nerves (also called radiculopathy)

Rotator Cuff Tendinitis

A common cause of shoulder pain is soreness of the tendon (a cord that attaches a muscle to a bone) of the rotator cuff (the part of the shoulder that helps circular motion). The rotator cuff is a set of four muscles (Supraspinatus, Infraspinatus, Subscapularis, and Teres Minor) that lie over the humeral head in the shoulder that help provide shoulder stability.

How do the rotator cuff muscles get injured?

The supraspinatus muscle rests on top of the shoulder. Its tendon travels under the bone on the outside of the shoulder (the acromion). This tendon is the one most often injured because of its position between the bones. As the tendon becomes inflamed (sore and swollen), it can become pinched between the 2 bones. The sac of fluid that cushions the tendon can also be damaged.

These muscles can become inflamed and produce shoulder pain. The pain tends to be:

- Generally worse at night or after activity
- Shoulder motion causes pain and is limited
- More common in athletes who do a lot of throwing
- More common in older individuals (over 50)

If the pain is severe, it can be difficult to distinguish between rotator cuff tendinitis and pain due to a pinched nerve in the neck. Tendinitis may be associated with a rotator cuff tear, which can be diagnosed with either an MRI scan or an arthrogram of the shoulder.

What can I do to help relieve the pain?

Treatment should help relieve the pain and help you restore your shoulder to normal function. Pain relief strategies include active rest (you can and should move your shoulder, but you shouldn't do strenuous activities like lifting heavy objects or playing tennis). Application of ice, taking nonsteroidal anti-inflammatory medicine such as ibuprofen (brand names: Advil, Motrin) or naproxen (brand name: Aleve) and, occasionally, an *injection of anti-inflammatory steroids* can also help.

Physical therapy. A trained therapist can give you special exercises may also help. The first step of rehabilitation therapy is simple range-of-motion exercises. These range-of-motion exercises are followed by resistance exercises using rubber tubing or light dumbbells. The final step is resistance training with weight machines or free weights. **You should always discuss this with your primary care provider before beginning an exercise program.**

Will I need surgery?

Sometimes an injury that lasts a long time will cause the tendon to tear. This type of injury may need surgery. A tear of the rotator cuff is suspected when the pain goes on in spite of a good rehabilitation program or when there is weakness in certain motions of the arm.

Bursitis

Another common cause is soreness of the subacromial bursa (a sac of fluid under the highest part of the shoulder). You might experience soreness after activities such as painting, lifting or playing a sport, which require you to lift your arms. Or you may not remember any specific injury. Often an injection of corticosteroids will help with this pain due to inflammation.

Adhesive Capsulitis or Frozen Shoulder

Adhesive capsulitis is when you lose the ability to move your shoulder around in all directions without pain. Doctors sometimes refer to this problem as "frozen shoulder" because your shoulder can become stiff and it may be difficult for you to move it at all.

Does my shoulder actually freeze?

No, sometimes adhesive capsulitis can cause your shoulder to just stop moving. This happens because if you don't use your shoulder enough (because it hurts to move) or if you use it the wrong way, your shoulder will develop scar tissue that stops it from moving around easily. Your shoulder may go through several stages as the scar tissue forms, and it may get better on its own.

1. **The painful stage.** At first, your shoulder may ache and feel stiff. Then it may get very painful. This stage may last about 3 to 8 months.
2. **The adhesive stage.** During the second stage, you may not actually have as much pain, but your shoulder keeps getting stiffer. This stage usually lasts about 4 to 6 months.
3. **The recovery stage.** The final stage, which usually lasts about 1 to 3 months, isn't very painful. It becomes very hard to move your shoulder even a little bit. Then after a while, the stiffness slowly goes away. You can move your shoulder again. Although you may not get the full movement of your shoulder back, you should be able to do many more activities. As your shoulder movement increases, you may still have pain at times.

What causes adhesive capsulitis?

Adhesive capsulitis develops when the connective tissue in your shoulder joint tightens and restricts your joint's movement. Often, this occurs after a time when you have been less active because of another injury, such as a rotator cuff injury, broken arm or recovering from a surgery. People 40 years of age and older are at higher risk for adhesive capsulitis, especially women. Certain health conditions, including diabetes, can also put you at higher risk.

How is adhesive capsulitis diagnosed?

Your doctor may be able to tell you have adhesive capsulitis just by talking to you about your symptoms and watching you move. Your doctor may press on parts of your shoulder to see what might be causing the pain. Your doctor may also want to take an X-ray or do an MRI of your shoulder to look for other problems.

How is adhesive capsulitis treated?

Nonsurgical treatments include analgesics (e.g., acetaminophen, nonsteroidal anti-inflammatory drugs), oral prednisone, and *intra-articular corticosteroid injections*. Your doctor will tell you about exercises you can do to help break up the scar tissue in your shoulder. You may need to see a physical therapist to help you with these exercises. Sometimes the exercises hurt, so your doctor may give you something for the pain or to relax your muscles. Putting a heating pad or an ice pack on your shoulder for a few minutes before you do the exercise may also help with the pain.

Surgical treatments include manipulation of the joint under anesthesia and capsular release.