

Vasu Pai MS, MCh, FRACS

Adhesive Capsulitis or Frozen Shoulder

Frozen shoulder is a painful and stiff condition. Of the shoulder

It results in a severe loss of motion in the shoulder.

It may follow an injury, or it may arise gradually with no injury or warning.

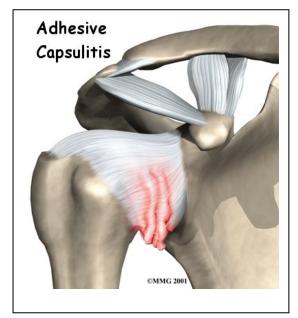
What part of the shoulder is affected?

The shoulder is made up of <u>three bones</u>: the scapula (shoulder blade), the humerus (upper arm bone), and the clavicle (collarbone). The joint capsule is a watertight sac that encloses the joint and the fluids that bathe and lubricate it. The walls of the joint capsule are made up of ligaments

In frozen shoulder, **inflammation** in the joint makes the normally loose parts of the joint capsule stick together. This seriously limits the shoulder's ability to move, and causes the shoulder to freeze.

Why did my shoulder freeze up?

The cause of frozen shoulder is not known May be caused by an autoimmune reaction. Frozen shoulder may begin after a shoulder injury, fracture, or surgery. It can also start if the shoulder is not being used normally. This can happen after a wrist fracture, when the arm is kept in a sling for several weeks



It is described the normal course of a frozen shoulder as having three stages:

Stage one: In the "freezing" stage, which may last from six weeks to nine months, the patient develops a slow onset of pain. As the pain worsens, the shoulder loses motion.

Stage two: The "frozen" stage is marked by a slow improvement in pain, but the stiffness remains. This stage generally lasts four months to nine months.

Stage three: The final stage is the "thawing", during which shoulder motion slowly returns toward normal.

This generally lasts five months to 26 months

What are the symptoms of frozen shoulder?

Primarily shoulder pain A reduced range of motion in the joint. The shoulder can also be quite painful at night. The tightness in the shoulder can make it difficult to do regular activities like getting dressed, combing your hair, or reaching across a table.

What tests will my doctor run?

Basis of your medical history and physical examination.

With frozen shoulder, the shoulder motion is the same whether the patient or the doctor tries to move the arm [cf. rotator cuff tear]. With a rotator cuff tear, the patient cannot move the arm. But when someone else lifts the arm it can be moved in a nearly normal range of motion.

X-rays are normal

4. The MRI scan shows tendons and other soft tissues as well as the bones.



What treatment options are available? Non-surgical Treatment

Treatment of frozen shoulder can be frustrating and slow.

Most cases eventually improve, but the process may take months.

Anti-inflammatory medications, such as aspirin and ibuprofen.

Physical or occupational therapy treatments are a critical part

An injection of cortisone in to the joint. Cortisone is a steroid that is very effective at reducing inflammation.

Manipulation under anesthesia



Figure 1. Overhead stretch: Lie on your back with your arms at your sides. Lift one arm straight up and over your head. Grab your elbow with your other arm and exert gentle pressure to stretch the arm as far as you can.



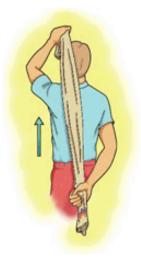


Figure 2. Cross-body reach: Stand and lift one arm straight out to the one side. Keeping the arm at the same height, bring it to the front and across your body. As it passes the front of your body, grab the elbow with your other arm and exert gentle pressure to stretch the shoulder.

Figure 3. Towel stretch: Drape a towel over the opposite shoulder, and grab it with your hand behind your back. Gently pull the towel upward with your other hand. You should feel stretch in your shoulder and upper arm.

If progress in rehabilitation is slow, your doctor may recommend manipulation under anesthesia. This means you are put to sleep with general anesthesia. Then the surgeon aggressively stretches your shoulder joint. The heavy action of the manipulation stretches the shoulder joint capsule and breaks up the scar tissue. In most cases, the manipulation improves motion in the joint faster than allowing nature to take its course.

This procedure has risks. There is a very slight chance the stretching can injure the nerves of the brachial plexus, the network of nerves running to your arm. And there is a risk of fracturing the humerus (the bone of the upper arm), especially in people who have osteoporosis (fragile bones).

8. Arthroscopic Release

When it becomes clear that physical therapy and manipulation under anesthesia have not improved shoulder motion, arthroscopic release may be needed. This procedure is usually done using an anesthesia block to deaden the arm. The surgeon uses an arthroscope to see inside the shoulder. An arthroscope is a slender tube with a camera attached. It allows the surgeon to see inside the joint.

During the athroscopic procedure, the surgeon cuts (releases) scar tissue, the ligament on top of the shoulder (coracohumeral ligament), and a small portion of the joint capsule.

If shoulder movement is not regained or if the surgeon is unable to complete the surgery using the arthroscope, an open procedure may be needed. An open procedure requires a larger incision so the surgeon can work in the joint more easily.

At the end of the release procedure, the surgeon gently manipulates the shoulder to gain additional motion. A steroid medicine may be injected into the shoulder joint at the completion of the procedure.

What can I expect after treatment?

1.The primary goal of physical therapy is to help you regain full range of motion in the shoulder.

2. Therapists also use massage or other types of hands-on treatment to ease muscle spasm and pain.