

Frozen Shoulder – Adhesive Capsulitis

Quincy Medical Center

Massachusetts General Hospital

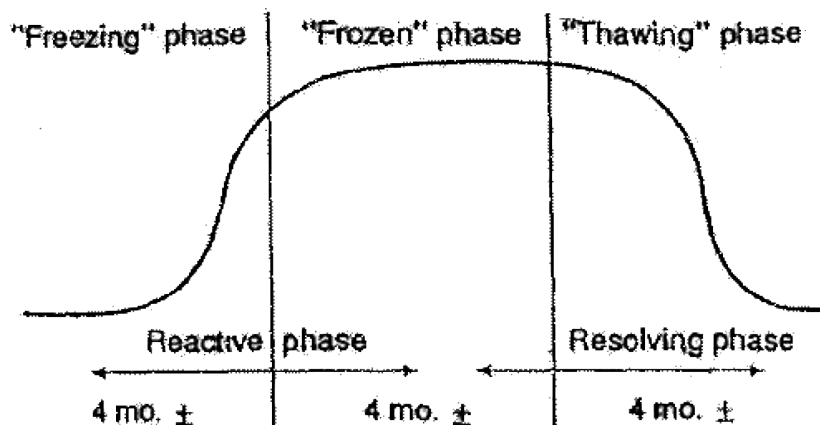
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If you're having trouble lifting your arm above your head, reaching across your body or behind your back, and have limited motion in your shoulder, it may be an early symptom of frozen shoulder. Chronic idiopathic adhesive capsulitis is a condition of the shoulder with several unusual characteristics:

- Its cause is unknown.
- It does not occur in other joints or parts of the body.
- Range of motion is limited globally, that is all planes of motion are affected by loss of motion.
- It is usually a self-limited syndrome, when untreated, passing through three distinct phases of three to four months each:
 - The *freezing* phase
 - The *frozen* phase
 - The *thawing* phase
- In most cases; the shoulder and its tissues recover completely with time, although there may be some residual restriction in shoulder motion in some cases.
- It may involve the opposite shoulder, but rarely recurs in the same shoulder.
- X-rays are usually normal
- Frozen shoulder is not associated with arthritis or malignancies.
- Affects more women than men.
- Usual onset begins between ages 40 and 65.
- Affects approximately 10% to 20% of diabetics.
- Other predisposing factors include: - A period of enforced immobility, resulting from trauma, overuse injuries or surgery. - Hyperthyroidism. – Cardiovascular disease - Clinical depression. - Parkinson's disease.

Frozen shoulder develops slowly, and in three stages.



Freezing Phase

The freezing phase is a reactive phase. For patients with an acutely and globally painful shoulder, physical therapy and stretching can cause additional discomfort and stiffening. Resting from painful activities and analgesics may help with pain control.

Frozen Phase

In the frozen phase, the shoulder becomes tighter, the pain becomes less and the patient is more comfortable. The patient is encouraged to use the shoulder actively and if comfortable, do gentle stretching exercises.

Thawing Phase

In this phase, patients report that the motion of the shoulder is gradually returning. The pain is continuing to decrease. At this time, gentle passive stretching can be increased as long as motion improves and the stretching does not aggravate the pain.

Diagnosis and treatment

The doctor will test the range of motion in your arm and may ask for an X-ray to rule out any underlying condition. Treatment is geared to relieving the discomfort and restoring motion and function to the shoulder.

Treatment includes:

Medications (such as aspirin, alleve or ibuprofen) to reduce the inflammation and relieve the pain.

- Range of motion exercises
- Heat or ice therapies.
- Corticosteroid (cortisone) injections.
- Range of motion exercises, such as those described below, done several times a day.

Range of Motion and Stretching Exercises

The following range of motion exercises are usually helpful to keep the shoulder moving and help prevent further tightening. When performing these exercises, do them slowly and hold the arm at the end-point of the range of motion for a few seconds. Release the stretch slowly and repeat. Do not force motion through pain. Follow the instructions for each exercise as described in the illustrations.

Usually, the pendulum exercise, tabletop slides and supine neutral external rotation stretches are the easiest to do and the most pain free. After 7 to 10 days, if the shoulder is improving and the exercises do not worsen the pain, the remaining exercises can be gradually added. Add one new exercise every 5 or 6 days in the following order: wall climbing or supine passive forward flexion, internal rotation behind the back, supine external rotation with abduction, and horizontal adduction stretches. As the shoulder motion improves further, you can add the standing external rotation, external rotation in the corner and internal rotation in abduction stretches.



If the exercises seem to make the pain worse or tighten the shoulder further, stop doing the exercises.

Pendulum Exercise

Bend over at the waist so that the arm falls away from the body and dangles in a relaxed way. Use your body to initiate a circular motion. Make small circles while keeping the shoulder relaxed. Do this for 2 to 3 minutes at a time.

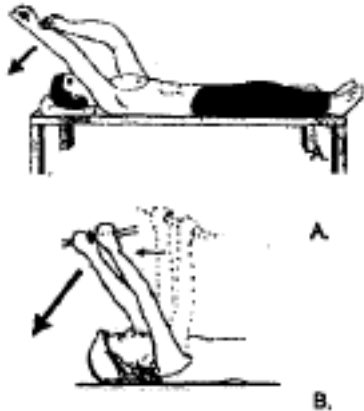


Table-top Arm Slides

Sit in a chair adjacent to a smooth table top. Lift the involved arm with the uninvolved arm and place the hand and forearm on the table. Bend forward at the waist allowing the hand and arm to slide forward. Do 10 repetitions.

Supine Neutral External Rotation

Lie on your back. Keep the arm and elbow tight against your side. Keep the elbow at a 90 degree angle. Push the stick into the hand of the involved arm to make the arm rotate away from the body. Do 10 repetitions.



Supine Passive Forward Flexion

Lie on your back. Using a stick (figure A.), or using the strength of the uninvolved arm (figure B.), raise the involved arm up and then backward (as if to reach overhead) Do 10 repetitions

Wall Climb Stretch

Stand facing a wall, place the hand of the affected arm on the wall. Slide the hand up the wall, allowing the hand and arm to go upward. As you are able to stretch the hand and arm higher, you should move your body closer to the wall. Hold the stretch for 15 to 20 seconds. Do 10 repetitions.



Internal Rotation: Behind-the-Back Stretch

Sitting in a chair or standing, place the hand of the affected arm back at the waistline. Use your opposite hand to help the other hand toward the shoulder blade of the opposite shoulder. Do 10



behind your higher repetitions.



Supine External Rotation with Abduction

Lie on your back. Place your hands behind your head as shown in the top illustration. Slowly lower your elbows to stretch the shoulders toward the surface you are lying on. Do 10 repetitions.



Horizontal Adduction Stretch

Lying on your back, hold the elbow of the affected arm with your hand. Gently stretch the elbow toward the opposite shoulder. Later, can be done standing. Do 10 repetitions.

opposite this stretch



Standing Neutral External Rotation

Hold a door handle or frame with the hand of the involved arm. While keeping the involved arm firmly against your side and the elbow at a right (90 degree) angle, Rotate your body away from the door to produce outward rotation at the shoulder. Do 10 repetitions.



External Rotation in Corner

Standing facing a corner, position the arms as illustrated with the elbows at shoulder level. Lean your body gently forward toward the corner until a stretch is felt. Hold this position gently for 15 to 20 seconds. Repeat 10 times.

Internal Rotation Stretch

Standing facing a corner, position the arms as illustrated with the elbows at shoulder level. The throwing arm is the one with pointed down. Lean your body gently forward toward a corner until a stretch is felt. Hold this position gently for 15 to 20 seconds. Repeat 10 times.



the hand



figure 1

Shoulder Shrugs and Scapular Retraction

Shrug shoulders upward as illustrated in figure 1. Pinch shoulder blades backward and together, as illustrated in figure 2.



figure 2