



The American Orthopaedic  
Society for Sports Medicine

## SPORTS TIP

# Frozen Shoulder

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### What is frozen shoulder?

Frozen shoulder is also referred to as adhesive capsulitis and is characterized by pain and loss of motion of the shoulder joint. The exact cause of frozen shoulder is unknown, even though it has been found to affect somewhere between two and five percent of people during their lifetime. Diabetes, thyroid disorder, a history of shoulder trauma, and periods of shoulder immobilization have been found to be risk factors that may lead to frozen shoulder. Females are also at higher risk. Occasionally, patients develop frozen shoulder after shoulder surgery or traumatic injury to the shoulder. Research suggests that the process is started with an inflammation of the lining of the joint within the shoulder. Gradually this area thickens and results in the shoulder becoming stiffer and more painful.

### What are the symptoms of frozen shoulder?

Patients with frozen shoulder often have a significant amount of shoulder pain, both when they use their arm and at rest. It is often very painful and often cannot be traced to any particular injury or event. This painful period often lasts several months. During that time the shoulder joint becomes stiffer and patients lose their range of motion. This often affects sleep and common daily activities such as dressing, reaching behind the back and any overhead activity. Gradually, after several weeks or months, the shoulder pain will diminish when the patient is not using their arm and only

be present with shoulder usage and with stretching. Patients with frozen shoulder usually experience a dramatic difference in their range of motion between shoulders when motion is measured.

### How is frozen shoulder diagnosed?

The physician examines the shoulder for range of motion and compares it to the patient's opposite side and to normal values. The diagnosis of frozen shoulder is usually evident after this examination and in combination with their physical history. Frozen shoulder does not appear on X-rays. Occasionally an MRI can confirm findings of frozen shoulder, but is often not needed.

### How does frozen shoulder progress?

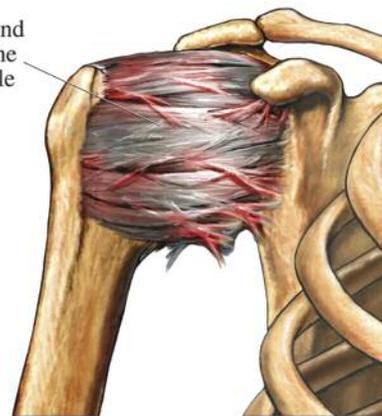
A frozen shoulder typically progresses through three stages. Initially there is a "painful stage" where the shoulder is very painful at rest and with use. The shoulder gradually gets stiffer during this phase. This stage typically lasts about four months, but may last up to nine months. The next stage is the "frozen stage" when the shoulder is painful with movement, but the pain at rest is resolved. During this stage the shoulder is very stiff and is painful with attempts at movement. This stage can last four to 12 months. The last stage is the "thawing stage," during which slow and steady return of motion occurs. This stage can last several

months, as well. The entire course of a frozen shoulder can take 12 to 24 months to resolve.

### How is frozen shoulder treated?

The treatment for frozen shoulder requires tremendous patience on the part of the patient and the treating physician. Frozen shoulder often takes a long time to improve and there are relatively few shortcuts. Treatment during the painful stage involves medication possibly, including cortisone injections. These injections may shorten the painful stage. The cortisone injection is placed inside the shoulder joint where the inflammation is located and where the pain is generated. Patients with frozen shoulder should do physical therapy and/or a home stretching program to help limit the loss of shoulder motion that occurs in the early stages. Stretches for frozen shoulder that are helpful include walking the fingers up the wall, pulling the arm/shoulder across the chest with the opposite arm, rotating the arm

Inflammation and thickening of the shoulder capsule



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with a cane or broomstick, and pulling the arm behind the back. Once the shoulder becomes less painful at rest, physical therapy and stretching are helpful in restoring lost shoulder motion.

### When is surgery necessary?

Fortunately, surgery is rarely necessary for frozen shoulder. In fact, surgery during the early stages of frozen shoulder should be avoided because the frozen shoulder will often return. Surgery can be performed after the majority of shoulder pain has resolved and is done to improve range of motion, if the “thawing” of the shoulder is not progressing appropriately. Treatment can also include arthroscopy which releases the thickened lining of the shoulder joint. This is followed by manipulation of the shoulder to break tissue free that is restricting the shoulder’s motion. Surgery is always followed by more therapy and stretching to maintain any gains in range of motion. Consult your specialist for further information on the decision to have surgery.