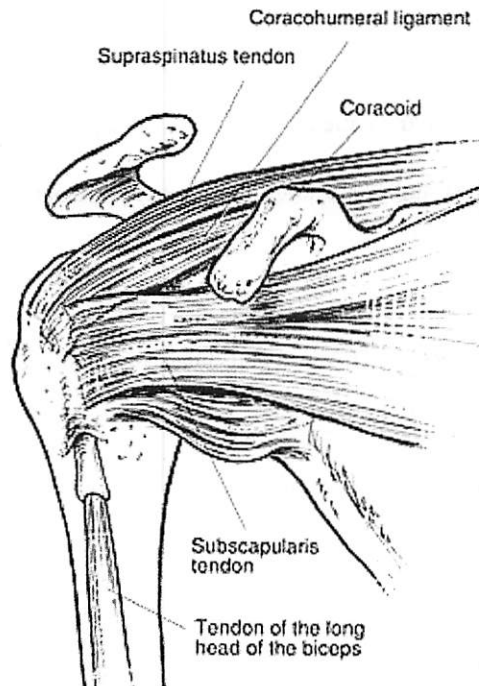


Frozen Shoulder

Frozen shoulder is characterized by pain and loss of motion or stiffness in the shoulder. It affects about two percent of the general population. Frozen shoulder most commonly affects patients between the ages of 40 and 60 years, with no clear predisposition based on sex, arm dominance, or occupation.

Cause



Anatomy of the shoulder, showing the ligaments and bones.

(Reproduced with permission from Hunt SA, Kwon YW, Zuckerman JD: The Rotator Interval: Anatomy, Pathology, and Strategies for Treatment. J Am Acad Orthop Surg 2007;15;218-227.)

The causes of frozen shoulder are not fully understood. The process involves thickening and contracture of the capsule surrounding the shoulder joint.

Frozen shoulder occurs much more commonly in individuals with diabetes, affecting 10 percent to 20 percent of these individuals. Other medical problems associated with increased risk of frozen shoulder include: hypothyroidism, hyperthyroidism, Parkinson's disease, and cardiac disease or surgery.

Frozen shoulder can develop after a shoulder is immobilized for a period of time. Attempts to prevent frozen shoulder include early motion of the shoulder after it has been injured.

Symptoms

Pain due to frozen shoulder is usually dull or aching. It can be worsened with attempted motion. The pain is usually located over the outer shoulder area and sometimes the upper arm.

The hallmark of the disorder is restricted motion or stiffness in the shoulder. The affected individual cannot move the shoulder normally. Motion is also limited when someone else attempts to move the shoulder for the patient.

956 Cooper Street; Jackson, MI 49202

Phone: 517.787.3900 Fax: 517.787.4318

Email: info@jacksonorthopedics.com Web Address: www.jacksonorthopedicspecialists.com

Some physicians have described the normal course of a frozen shoulder as having three stages:

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

Diagnosis

A doctor can diagnose frozen shoulder based on the patient's symptoms and a physical examination.

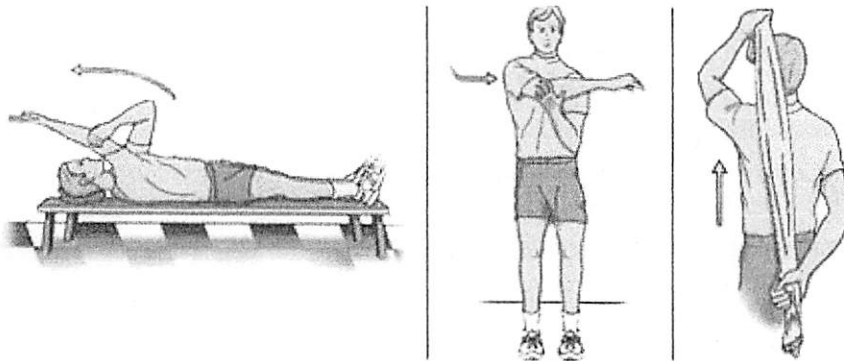
X-rays or MRI (magnetic resonance imaging) studies are sometimes used to rule out other causes of shoulder stiffness and pain, such as a rotator cuff tear.

Treatment

Frozen shoulder will generally get better on its own. However, this takes some time, occasionally up to two to three years. Treatment is aimed at pain control and restoring motion.

Nonsurgical Treatment

Pain control can be achieved with anti-inflammatory medications. These can include pills taken by mouth, such as ibuprofen, or by injection, such as corticosteroids.



Physical therapy is used to restore motion. This may be under the direct supervision of a physical therapist or via a home program. Therapy includes stretching or range-of-motion exercises for the shoulder. Sometimes, heat is used to help decrease pain. Examples of some of the exercises that might be recommended can be seen in the following figures.

If these methods fail, nerve blocks are sometimes used to limit pain and allow more aggressive physical therapy.

More than 90 percent of patients improve with these relatively simple treatments. Usually, the pain resolves and motion improves. However, in some cases, even after several years the motion does not return completely and a small amount of stiffness remains.

Surgical Treatment

Surgical intervention is considered when there is no improvement in pain or shoulder motion after an appropriate course of physical therapy and anti-inflammatory medications. When more invasive measures are considered, the patient must always consider that most individuals will get better if given sufficient time and that surgery always has risk involved.

Surgical intervention is aimed at stretching or releasing the contracted joint capsule of the shoulder. The most common methods include manipulation under anesthesia and shoulder arthroscopy:

Manipulation under anesthesia involves putting the patient to sleep and forcing the shoulder to move. This process causes the capsule to stretch or tear.

With shoulder arthroscopy, the surgeon makes several small incisions around the shoulder. A small camera and instruments are inserted through the incisions. These instruments are used to cut through the tight portions of the joint capsule.

Often, manipulation and arthroscopy are used together in combination to obtain maximum results. Most patients have very good results with these procedures.

After surgery, physical therapy is important to maintain the motion that was achieved with surgery. Recovery time varies, from six weeks to three months.