

## FROZEN SHOULDER

### Description:

Frozen shoulder (adhesive capsulitis) is a disorder characterized by pain and loss of motion or stiffness in the shoulder. It affects about two percent of the general population. It is more common in women between the ages of 40 to 70 years old, but can and does occur in men. The causes of frozen shoulder are not fully understood. The process involves inflammation then subsequent thickening and contracture of the capsule or ligaments that support and surround the shoulder joint. The diagnosis of frozen shoulder is based on the history of the patient's symptoms and physical examination. X-rays are almost always obtained and MRI (magnetic resonance imaging) studies are sometimes used to rule out other causes of shoulder stiffness and pain. Rotator cuff tears rarely result in stiffness of the shoulder. These tears will cause weakness and loss of ability to move the arm normally, but the shoulder usually does not become stiff.

### Risk Factors:

Frozen Shoulder occurs much more commonly in individuals with diabetes, affecting 10 percent to 20 percent of these individuals. Other medical problems can be associated with frozen shoulder but these causes are rare. Such problems may include: hypothyroidism, hyperthyroidism, Parkinson's disease, and cardiac disease or recent surgery. Frozen shoulder can develop after an injury or with prolonged immobilization of the shoulder joint.

### 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, nor can someone else move the shoulder. Some physicians have described the normal course of a frozen shoulder as having three stages:

- Stage one: In the "active or 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 or quit" 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.

### Treatment Options: Conservative

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 restoration of motion. The first goal is pain control. This can often be achieved with anti-inflammatory medications. These include pills taken by mouth, such as ibuprofen, Naprosyn, or Indomethacin (Indocin). To restore motion, physical therapy is usually prescribed. Therapy includes stretching or range-of-motion exercises for the shoulder.

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. In the long run, this small loss of motion does not seem to cause functional limitations.



#### Treatment Options: Surgical

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 "manipulating" or 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. They are used to cut through the tight portions of the joint capsule.
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Arthroscopic surgery is rarely necessary, however, if manipulation fails, then surgery is usually the next reasonable step. Most patients have very good results with these procedures. After surgery or with a manipulation, physical therapy is important to maintain the motion that was achieved with surgery. Recovery time varies. Some patients require six weeks to three months to gain maximum improvement.

*For additional patient education information go to [www.orthodoc.aaos.org/drpepper/](http://www.orthodoc.aaos.org/drpepper/)*

*Source: AAOS.org*

*Modified by R. Pepper Murray, MD*