Understanding a Frozen Shoulder and Manipulation Under General Anesthesia

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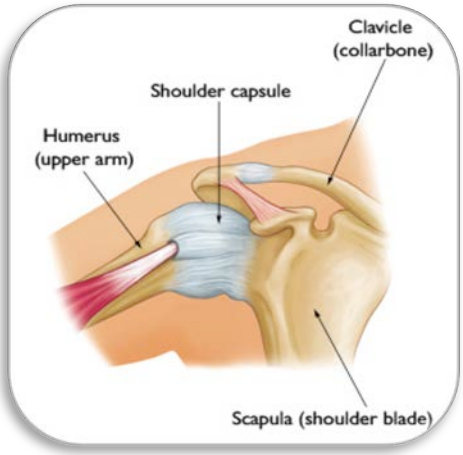
Our goal at The Orthopedic Institute of Wisconsin is to provide high quality care, both non-surgical and surgical. This approach allows our patients to regain lost function and experience pain relief that will hopefully result in the improvement of their quality of life. If you have any additional questions, please call: (414) 643-8800

Understanding Shoulder Anatomy

The shoulder is a ball and socket joint comprised of the upper arm bone (humerus) and a socket called the glenoid. There is a layer of connective tissue that surrounds the shoulder joint called the shoulder capsule. The function of the capsule is to separate the joint from the rest of the body, enclosing the lubricating joint fluid. It is also necessary to keep the shoulder joint in position.



Symptoms of a Frozen Shoulder

Patients with a frozen shoulder often present with limited range of motion and pain. Even when the arm is moved passively, resistance is met. Patients may describe the limited range of motion as hitting a wall. Pain is typically dull and achy, extending over the shoulder and sometimes down into the upper arm. Inflammation of the shoulder capsule can often lead to this pain.

What Causes a Frozen Shoulder?
Inflammation and scar tissue can build up around the shoulder capsule that severely limits motion and causes chronic pain. There are a few factors that may predispose a patient to a frozen shoulder:

- **Injury**: pain and trauma that leaves patients unable to move their shoulder can lead to a adhesive capsulitis
- **Surgery:** previous surgeries can cause scar tissue to accumulate, causing stiffness
- **Endocrine Diseases:** certain endocrine diseases including diabetes and thyroid disease
- **Insidious Onset:** most cases of frozen shoulder have no clear direct cause
- **"Gender Risk:"** females, in general, have a higher rate of adhesive capsulitis

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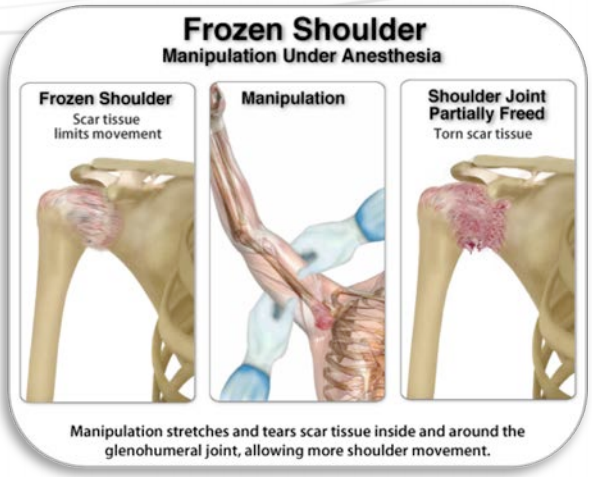
Treatment Options

A frozen shoulder is most often treated non-surgically in the form of physical therapy and cortisone injections. Physical therapy is used to stretch out the capsule in order to regain motion and cortisone injections reduce swelling and inflammation within the shoulder. Those patients who do not experience pain relief or improvement from these treatments have a surgical option called a Manipulation Under Anesthesia (MUA) and a Capsular Release.



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Typical Schedule of Follow-up Visits

Five-to-Seven day assessment
- Suture Removal
- Check in with Dr. Pennington's surgical team
- Physical Therapy Referral
- Pain check

Five-to Seven-week assessment
- Passive motion and active motion check
- Pain check
- Physical therapy progress

Future appointments
- Range of Motion
- Strength check
- Physical therapy progress

Dana Hahn, Patient Care Coord. | Brian Bartz, PA-C | William Pennington, MD | Joann Pitton, PA-C

Manipulation Under Anesthesia

MUA is a procedure that will allow the tightened joint capsule to be loosened non-surgically. This is accomplished while the patient is under general anesthesia, allowing Dr. Pennington to control the shoulder while muscles are relaxed and pain is blocked. Gentle pressure is applied on the shoulder joint in order to break up the scar tissue that has formed and is limiting the range of motion. This procedure is oftentimes followed by injections and physical therapy.

Capsular Release

A capsular release is performed when there is extremely high resistance in the mobility of the shoulder and a manipulation under anesthesia has failed. Typically, diabetic and post-operative patients will have a capsular release performed instead of a MUA. This surgery involves cutting and removing the thickened inflamed capsule to regain motion and reduce pain. It is performed arthroscopically meaning that 2-3 small incisions are made to allow a camera and surgical instruments to be inserted into the shoulder joint. Unlike a previous repair surgery, a capsular release requires immediate physical therapy following the surgery. If movement is not progressed soon after surgery, the chance of the frozen shoulder returning is quite high.

Post Operative Instructions

It is important to move the shoulder as much as possible after surgery to maintain the advancement in mobility gained from the MUA or Capsular Release. Physical Therapy will start within the week following your surgery to help further conserve and improve the range of motion. A continuous passive motion (CPM) chair will also be a part of your post-operative care to keep the shoulder as active as possible.