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Frozen Shoulder Release Post-Operative Rehabilitation Protocol

Frozen shoulder is the common name for a condition called adhesive capsulitis. It is characterized by loss of range of motion at the shoulder. This condition often comes on without warning or injury and gets progressively worse over time. Most people do not seek help until they have had enough loss of motion to effect everyday function. Early intervention however is the best way to combat this progressive problem.

The symptoms of frozen shoulder include general stiffness of the shoulder limiting functional movements of the arm. Frozen shoulder can limit all movements of the shoulder but often limits certain directions more than others. Many people notice it primarily when reaching out to the side and/or behind the body. This loss of motion is often accompanied by general aching pain at night or pain with movement, but can sometimes be painless.

Frozen shoulder affects women more often than men. Most of those affected are between the ages of 40 and 65. It can occur due to an extended period of immobility, a trauma to the shoulder, chronic overuse injury, hyperthyroidism, cardiovascular disease, clinical depression, or Parkinson's disease. Often however, frozen shoulder can occur without any predisposing factors or previous injury.

The first step to combating frozen shoulder is to see your physician if the symptoms of stiffness and or pain last greater than 2 weeks. At the Stone Clinic you would be tested for range of motion and strength as well as possible X-ray and MRI imaging to rule out any other underlying problem. Initial treatment for frozen shoulder would be a course of physical therapy and anti-inflammatory medication. In more severe cases a cortisone injection may be an option to help relieve inflammation and increase range of motion when physical therapy is not progressing as expected. Physical therapy begins with a careful evaluation of the shoulder, neck, and thoracic spine. The PT will customize treatment to the individual and his or her deficits. Generally speaking, therapy will include soft tissue mobilizations to loosen tight and spasmed muscles, joint mobilizations of the shoulder and the shoulder blade (scapula) to stretch the innermost sleeve surrounding the joint (the capsule), passive and active stretching exercises using a pulley or a straight bar such as a cane or golf club, cardiovascular training, total body movement training to integrate the shoulder towards normal activity. Modalities such as ultrasound, heat, and ice may also be used as needed during the rehabilitation process. Therapy may last anywhere from 4 weeks to 3-4 months. Arthroscopic surgery is performed as an outpatient under regional block when necessary for shoulders that are not responding to physical therapy. The procedure takes about an hour and usually results in significant improvement in the range of motion. Our post-operative program after frozen shoulder release is as follows:

<u>0-2 weeks</u>:

- Sling allowed as needed for comfort only, first 5-7 days, taking arm out often 5-7 times a day for elbow ROM
- Posture education and postural exercises
- Ball or putty squeezing throughout the day
- Icing every two hours for 15-20 minutes first 5-7 days, 3 times a day thereafter
- CPM (constant passive motion) machine 4-6 hours per day for 1-4 weeks
- Soft tissue mobilization focused on periscapular musculature, cervical spine, and rotator cuff
- Scapular mobilization
- Passive and active assisted ROM manually and using pulley at home going for full motion as soon as able without increased irritability
- Cardiovascular training program can include bike, treadmill, versa climber, UBE
- Core stabilization program

2-4 weeks:

- Full passive range of motion should be achieved by 2-4 weeks
- Scapular and glenohumeral joint mobilization as indicated
- Begin rotator cuff retraining and strengthening, focus on restoring proper biomechanics
- Integration of involved shoulder through bilateral UE activity and total motion training (full body movements using both upper and lower extremities)
- Continued cardiovascular and core strength training
- Continued icing 3 times per day

4-8 weeks:

- Progressive strength training contingent upon perfect biomechanics
- Development of independent home and gym program
- O.k. to return to swimming with good mechanics after 6 weeks

8-10 weeks:

- Progression into normal activity and exercise program
- Patient discharged with life-long home maintenance program to include daily ROM exercises, rotator cuff program, and cardiovascular program

NOTE: All progressions are approximations and should be used as a guideline only. Progression will be based on individual patient presentation, which is assessed throughout the treatment process.