



Frozen Shoulder

Frozen shoulder is a disabling condition, identified as shoulder pain and stiffness.

The symptoms and signs include:

Global restriction of shoulder movement with a painful arch of movement at the outset.

Limitation of external rotation and elevation, even though x-rays will show as normal.

The condition is classified as Primary Idiopathic Frozen Shoulder. This is identified by global limitation of glenohumeral motion, with a loss of compliance of the shoulder capsule. There is usually no specific underlying cause found for this condition.

A secondary stiff shoulder or Secondary Frozen Shoulder, presents after injury or surgery. It may also follow an accompanying condition, such as subacromial impingement or a rotator cuff tear.

The frozen shoulder has been found to be more common in association with the following conditions:

1. Diabetes. There is a 2-4 times increased risk for diabetics of developing frozen shoulder, especially poorly controlled Insulin-dependent diabetics.
2. Endocrine abnormalities, particularly hypothyroidism
3. Trauma.

Diagnosis: The diagnosis of a Primary Idiopathic Frozen Shoulder is made on the basis of:

1. Age: 40-60 years old, females more common than males
2. Pain: The pain is of a constant nature, severe, affecting sleep, shooting pain with forceful movement.
3. Loss of external rotation: Loss of external rotation (passive external rotation <0 degrees)

Natural History: The disease goes through 3 stages. These stages last for approximately 2 years.

Stages:

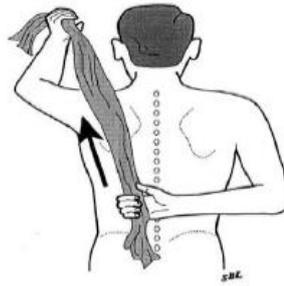
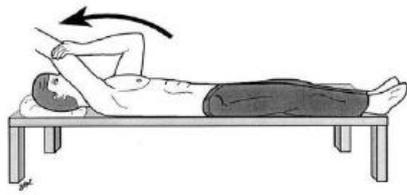
1. **Freezing phase:** This is associated with pain and loss of movement for about 3-6 months.
2. **Frozen phase:** This lasts for approximately 3-6 months, with pain at extreme range of movement and marked stiffness.
3. **Thawing phase:** This last for approximately 9-18 months, usually painless and the stiffness starts to gradual resolve at this stage.

Treatments: Treatment options include

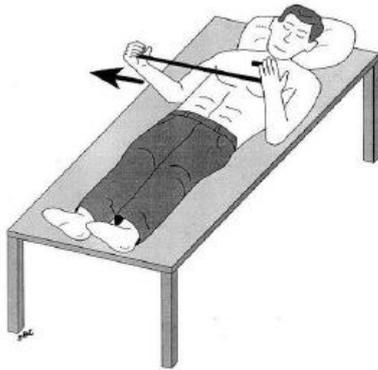
1. Nothing.
2. Physiotherapy.
3. Distention injections under x-ray control.
4. Steroid injection into the joint.
5. Manipulation under anesthetics plus steroid injection.
6. Arthroscopic capsular release.

Non-Operative Treatment:

Physiotherapy can improve range of movement, but not necessarily pain. Jackin's exercises can be done at home (figure 1). In my experience, distention of the joint with local anesthetic and steroid under x-ray control combined with physiotherapy is quite successful in the first stage of frozen shoulder. However once the second stage is reached then surgical solution is usually the treatment option.



Matsen Fig. 2-36



Matsen Fig. 2-34



Matsen Fig. 2-37

Operative treatment

Surgical solution involves **manipulation under anaesthetic**. This involves mobilizing the arm under anesthetic to break the scars formed in the joint lining due to the disease. However if that fail to produce a comparable range of movement to the other, normal, side then I proceed to an arthroscopic release in the same setting.

Manipulation is not recommended in secondary frozen shoulder, therefore surgical capsular release is the best treatment.

If manipulation fails or is contra-indicated then **arthroscopic release** is very effective. It involves using a cutting wand to release the contracted shoulder capsule 360 degrees. This yields a success rate of over 90% with the help of post-operative physiotherapy.

Aims of Physiotherapy

The patient is seen prior to discharge by the physiotherapist when passive and active range of motion is begun. It is important that the joint is taken through all planes of movement. The patient is discharged with exercise and advice on pain control. A physiotherapy appointment must be arranged for the following day.

The aim is to restore full range of movement as quickly as possible through passive and active assisted exercises.

Return to Functional Activities

Driving: One week post-op, Return to work: - dependent on the patient's occupation, Golf: 6 weeks, (but not driving range), Racquet Sports: sport specific training when comfortable, competitive play after 3 months, Lifting: as able.