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Frozen Shoulder / Adhesive Capsulitis

What is it?

Frozen Shoulder (or Adhesive Capsulitis) is a very painful condition of the shoulder in which the shoulder becomes progressively stiffer and more immovable. Frozen shoulder may be associated with diabetes, high cholesterol, heart disease or previous injury to the shoulder or shoulder surgery. The lining of the shoulder joint, known as the capsule, is normally very flexible. The shoulder is one of the most mobile joints within the body and this is permitted by the flexibility of its capsule. With a frozen shoulder, the capsule or lining of the joint becomes stiffened due to inflammation and contraction of this structure. This causes progressive limitation of range of motion of the shoulder.

What are the symptoms?

Frozen shoulder normally starts with no preceding injury but may occur after surgery or injury to the shoulder. The condition usually goes through three phases starting with pain. The three phases are:

Freezing Phase:

Pain which is often dramatic at this stage and the patient progressively loses range of motion pain may be worse at night. This stage usually lasts approximately 6 - 9 months.

Frozen phase:

Pain beings to diminish but the stiffness of the shoulder remains. This often causes the patient problems with their ability to perform normal daily activities, with even simple tasks such as dressing or driving. This stage may last 6 - 9 months.

Thawing phase:

The condition, in most cases, eventually starts to resolve. The shoulder remains painless, and most patients will reach this phase by approximately 12 - 18 months after the onset of symptoms.

Clinical examination

Most patients demonstrate a lack of movement of the shoulder with flexion of the shoulder, abduction and external rotator or moving the hand away from the body being most characteristic of this condition. It is often painful in the early phases and the shoulder is often tender to palpate. In the frozen phase, the pain subsides and becomes more comfortable although patients are still limited in their ability to perform normal daily activities.

What investigations are required?

The diagnosis is usually a clinical one however many patients attend with an x-ray which is used to exclude other conditions which may mimic frozen shoulder such as shoulder osteoarthritis or possibly a dislocation of the shoulder. Frequently, an ultrasound scan is used to assess the rotator cuff also.

What are the treatment options?

Non-operative Treatment

Most shoulders will improve significantly over 2 - 4 years after onset. Many patients are not prepared to wait this long. Treatment possibilities to reduce the time taken for this condition to resolve include physiotherapy (this may prevent further stiffness and regain range of motion), pain killers and anti-inflammatory can reduce the pain in the initial stage, a corticosteroid injection in the earlier freezing phase may reduce and control some of the pain and progression of the disease. Hydro dilatation procedure: this procedure is performed by a radiologist where fluid is injected into the tight shoulder capsule under pressure to dilate the stiff, tightened capsule. This is frequently successful in improving range of motion and reducing pain.

Operative Treatment

If the above treatments have been unsuccessful regarding range of motion, surgery may be considered. The most frequent surgery performed is an arthroscopic capsular release, often combined with manipulation under anaesthetic. This is an excellent procedure for both pain relief and restoring movement with high success rates. It is important to undergo extensive physiotherapy following the surgery, to maintain range of motion. During the procedure, an arthroscopic procedure is used to visualise the shoulder joint, the anterior and inferior capsule is divided under direct vision with dramatic improvement in range of motion.

Possible complications

Complications are generic to all shoulder procedures which are infection, bleeding, and damage to surrounding structures.