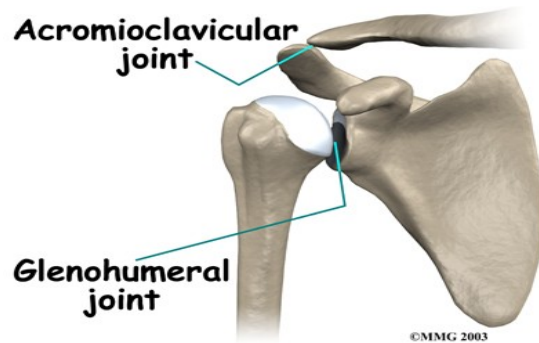
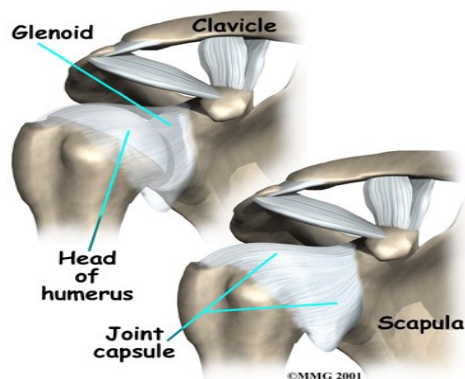


FROZEN SHOULDER

Frozen shoulder or adhesive capsulitis is a condition involving the capsule of the shoulder joint. The shoulder is primarily made of 3 bones namely the upper arm bone or humerus, shoulder blade bone or scapula and collar bone or clavicle. The joint is well supported by many muscles like the rotator cuff muscles namely supraspinatus, infraspinatus, teres minor and subscapularis, deltoid and teres major. Also the joint is reinforced by various ligaments like glenohumeral ligaments. The capsule of the shoulder is relatively a weak structure and as a result of ageing it shrinks.

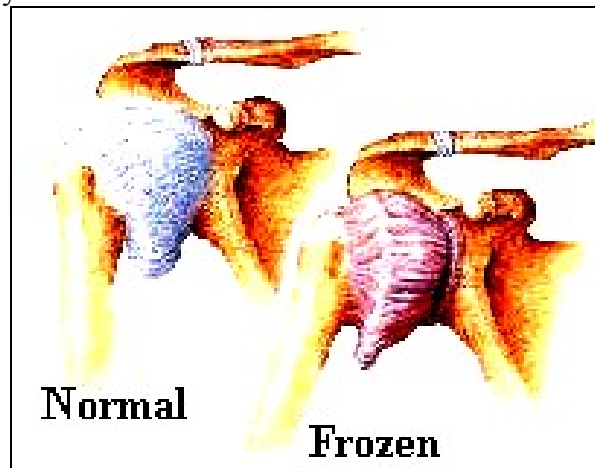


SHOULDER ANATOMY



CAUSES:

The main cause for frozen shoulder is idiopathic or unknown cause due to auto immune reaction in which the body fails to recognize its own tissues and attacks it. The other causes for adhesive capsulitis are immobilization in which the shoulder joint when not moved for a prolonged period of time say after a fracture or so and trauma of the shoulder, then surgery to shoulder etc.



PREDISPOSING FACTORS:

Many conditions predispose the shoulder joint to adhesive capsulitis. They are diabetes where the blood supply to the shoulder joint is reduced and deprive the shoulder of its nutrients, then any surgery to the breast or chest region, cardiovascular disease and stroke.

STAGES AND SYMPTOMS:

The problem of frozen shoulder affects predominantly women more when compared to men. The usual onset of this condition is between 30 to 65 years. The stages of frozen shoulder are stage 1 or 'freezing' where the pain increases on movement, the movements of the shoulder are restricted and the stage lasts for 2 to 9 months. In stage 2 or 'frozen' the pain subsides although not fully, the movements are restricted and the stage lasts for around 4 to 12 months. In stage 3 or thawing the condition tends to resolve, the movements are regained and the stage lasts for 12 to 42 months.



PHYSIOTHERAPY:

The condition can be treated conservatively (non surgical method), surgically and pharmacologically. The non surgical method involves treatment by physiotherapy which includes heat therapy with modalities such as short wave diathermy, hot packs, ultrasound and infra red irradiation. Heat therapy helps in improving the blood circulation, scar mobilization and collagen extensibility. Other forms of physiotherapy include pain relieving modalities such as interferential therapy and transcutaneous electrical nerve stimulation that helps in relieving the pain by release of body's pain killer substances like endorphins and enkephalin and also by blocking the pain impulses to be perceived by the brain.



ULTRASOUND THERAPY TO SHOULDER JOINT

EXERCISES:

The exercises play an important role in the management of frozen shoulder. A variety of exercises are advocated in the treatment of the adhesive capsulitis like ROM exercises, stretching exercises and strengthening exercises. ROM exercises are wand exercises, overhead pulley exercises, pendulum exercises, wall ladder and shoulder wheel exercises. The stretching exercises are posterior capsule stretch, inferior capsule stretch and towel stretch. The strengthening exercises include strengthening shoulder muscles like supraspinatus, infraspinatus, teres minor and subscapularis.

Exercises for Frozen Shoulder please go to **Home exercises**.