## Shoulder Anatomy

3 bones make up the shoulder joint:

- scapula (shoulder blade)
- humerus (upper arm bone)
- clavicle (collarbone).

The joint capsule is a watertight sac that encloses the joint and the fluids that bathe and lubricate it. The walls of the joint capsule are made up of ligaments. Ligaments are soft connective tissues that attach bones to bones.

The joint capsule has a considerable amount of slack, loose tissue, so the shoulder is unrestricted as it moves through its large range of motion.

Normal joint capsule

Adhesions/ scarring of joint capsule
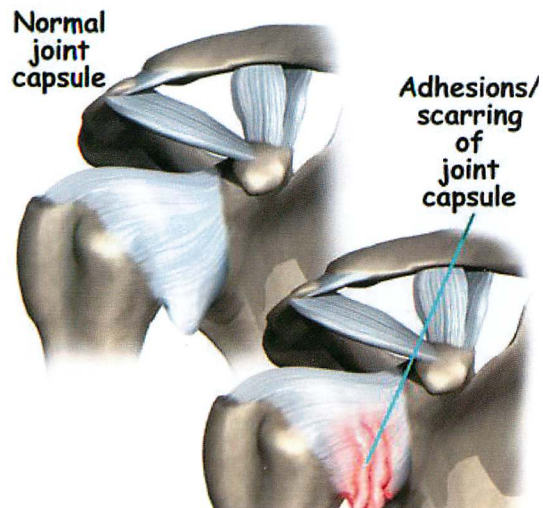
What is Adhesive Capsulitis?

Adhesive capsulitis, better known as "frozen shoulder", occurs when inflammation in the shoulder joint makes the normally loose parts of the joint capsule stick together. This seriously limits the shoulder's ability to move.

What Causes Adhesive Capsulitis?

The causes of adhesive capsulitis are not thoroughly known. A frozen shoulder can occur following immobilization of the arm due to injury or surgery. It can also occur after another shoulder injury such as a rotator cuff tear or impingement syndrome, as a result of not using the shoulder as much as one normally would.

Symptoms

Common symptoms of adhesive capsulitis include the following:

- Very limited range of motion at the shoulder

- Shoulder pain with everyday activities such as getting dressed, reaching across a table, or sleeping on the affected side

How Physical Therapy Can Help

Physical Therapy can help patients with adhesive capsulitis in a number of ways.

- Modalities (heat/ice, electric stimulation, ultrasound) to decrease pain/inflammation and promote healing

- Manual techniques to improve shoulder range of motion (ROM)

- Therapeutic exercises to strengthen rotator cuff muscles and stabilizers of the scapula

- Personalized home exercise program to maintain strength/flexibility outside of therapy

With physical therapy, many patients gain relief from their adhesive capsulitis symptoms and are able to return to full activity with improved strength and flexibility.