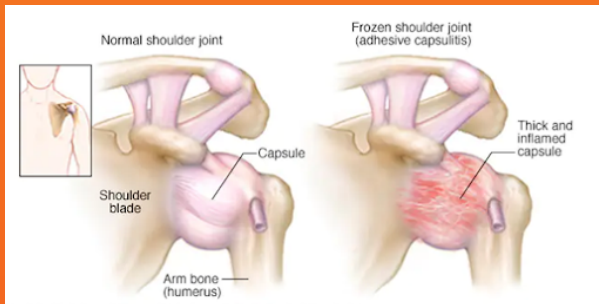


# FROZEN SHOULDER



## What is it

Frozen shoulder, or Adhesive Capsulitis, is a painful condition when the joint capsule becomes thick, stiff, and inflamed. The pain and thickening also leads to limited mobility of the shoulder joint.

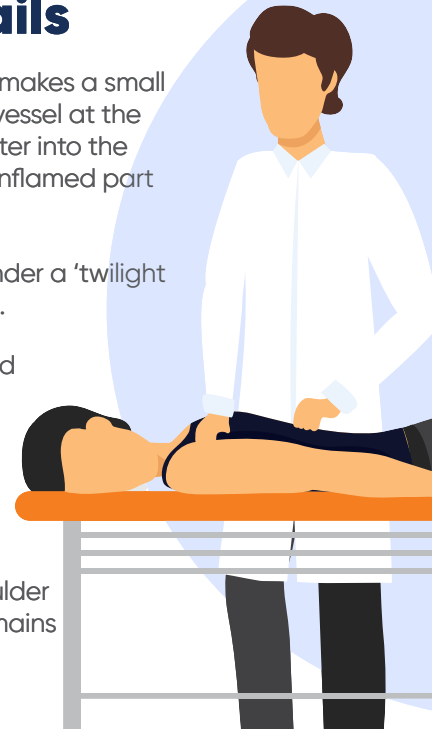


## Adhesive Capsulitis Embolization (ACE)

The inflammation that contributes to the pain and capsule thickening is caused by abnormal and increased blood flow with new vessels, or hypervascularity, to the joint capsule. ACE is a minimally invasive procedure that injects microspheres into the abnormal vessels, reducing the increased blood flow, and therefore disrupting the pain-inflammation cycle. Restoring normal blood flow to the capsule has shown to reduce pain and restore motion to the shoulder.

## Procedure Details

- The interventional Radiologist makes a small needle puncture into a blood vessel at the wrist and guides a microcatheter into the blood vessels that supply the inflamed part of shoulder.
- The procedure is performed under a 'twilight sleep' and is relatively painless.
- Microscopic beads are injected into the areas with abnormal vessels and hypervascularity, reducing the excessive flow causing the pain and inflammation.
- Normal blood flow to the shoulder and its surrounding tissues remains intact after the procedure



## Advantages of ACE



No surgical incision, manipulation or injection into the shoulder joint



Painless procedure lasting about one hour



Symptom improvement usually within 3-4 weeks



Typically return to work within a day or two without the need for a lengthy recovery



Very low complication rate without any effect on future shoulder treatments

## The facts



Frozen shoulder most commonly occurs in adults between 40 and 60 years old



Affects more woman than men



Symptoms from frozen shoulder can last from 1-3 years



Between 10 and 20 percent of individuals with diabetes develop frozen shoulder



It is common to develop frozen shoulder after a shoulder surgery or injury