# **Frozen shoulder**

#### Adhesive capsulitis.

Frozen shoulder is when the shoulder is painful and loses motion because of inflammation.

## Causes, incidence, and risk factors

The joint capsule of the shoulder joint has ligaments that hold the shoulder bones to each other. When the capsule becomes inflamed, the shoulder bones are unable to move freely in the joint.

Most of the time there is no cause for frozen shoulder. However, risk factors include:

- Cervical disk disease of the neck
- Diabetes
- Shoulder injury
- Shoulder surgery
- Open heart surgery
- Hyperthyroidism

#### **Symptoms**

The main symptoms are:

- Decreased motion of the shoulder
- Pain
- Stiffness

Frozen shoulder without any known cause starts with pain. This pain prevents you from moving your arm. The lack of movement leads to stiffness and then even less motion. Over time, you become unable to perform activities such as reaching over your head or behind you.

### Signs and tests

The health care provider will make the diagnosis based on your symptoms and an examination of your shoulder. You will have a loss of rotation in your shoulder.

You may have x-rays of the shoulder to make sure there is no other problem, such as arthritis. Sometimes an MRI exam may show inflammation, but there are no specific signs to diagnose frozen shoulder.

### Treatment

Pain is treated with nonsteroidal anti-inflammatory medications (NSAIDs) and steroid injections. Steroid injections plus physical therapy can improve your motion.

It can take a few weeks to see progress, but it may take as long as 6 - 9 months to have a complete recovery. The physical therapy is intense and needs to be done every day.

If nothing is done, the condition should get better by itself within 2 years with little loss of motion.

Any risk factors for frozen shoulder, such as diabetes or thyroid problems should also be treated.

Surgery is recommended if nonsurgical treatment is not effective. This procedure is done under anesthesia. See: Shoulder arthroscopy

Your health care provider will release the scar tissue by bringing the shoulder through a full range of motion. Arthroscopic surgery can also be used to cut the tight ligaments and remove the scar tissue from the shoulder.

Some surgeons may use repeated pain blocks after surgery so you can participate in physical therapy.

## **Expectations (prognosis)**

Treatment with therapy and NSAIDs will usually return the motion and function of the shoulder within a year. Even if left untreated, the frozen shoulder can get better by itself in 24 months.

Even if surgery restores motion, you must continue physical therapy for several weeks or months afterward to prevent the frozen shoulder from returning. Treatment may fail if you cannot tolerate physical therapy.

### Complications

- Stiffness and pain continue even with therapy
- The arm can break if the shoulder is moved forcefully during surgery

### Calling your health care provider

If you have shoulder pain and stiffness and suspect you may have a frozen shoulder, contact your health care provider for proper referral and treatment.

### **Prevention**

The best way to prevent frozen shoulder is to contact your health care provider if you develop shoulder pain that limits your range of motion for an extended period of time. This will allow early treatment and help avoid stiffness.

People who have diabetes will be less likely to get frozen shoulder if they keep their condition under control.