Many are cold but few are frozen

By TOM SARTOR

After taking a fall a few months ago, I injured my shoulder. Since that time it has progressively worsened. I didn't think it was such a big deal at the time. I have purposely tried to avoid strenuous activities, but my shoulder is so stiff I can barely move it. A close friend experienced similar discomfort and was told he had frozen shoulder syndrome by his health practitioner. What exactly does this mean and can it be treated.

The term frozen shoulder denotes a gradual loss of movement in the shoulder joint. The disorder is more appropriately termed adhesive capsulitis, referring to adhesions within the shoulder. The shoulder joint consists of a ball (the humeral head) and a socket (the glenoid). The two of them fit into each other much like a golf ball rests on a tee. Tough connective tissue, called the shoulder capsule surrounds the joint and plays an important role in assisting movement.

The shoulder is normally one of the most mobile joints in the body. Many shoulder disorders elicit pain and a loss of motion. Frozen shoulder results from inflammation (swelling, pain and irritation) of the tissues surrounding the joint. Normally the shoulder capsule has folds that can expand and contract as the shoulder moves through its normal ranges of motion.

Inflammation sets up the shoulder with an environment that encourages the development of scar formation (adhesion). As the capsule scars the folds begin to tighten, restricting proper motion and subsequently lowering the threshold for pain. Accessory muscles overwork in an attempt to compensate for deficient shoulder muscles, causing aching posterior shoulder and neck muscles.

Diagnosis of the condition begins with a thorough history and physical examination. X-rays may be taken to rule out other underlying causes (arthritis, calcium deposits, pathology). Key diagnostic points include unrelenting pain that is stabbing and sharp in character. Motion of the shoulder is also restricted in all planes, but abduction (movement away from the mid-line of the body), external rotation and elevation are most evident. Both active and passive (those performed by the doctor) movements of the shoulder joint are limited. The loss of motion with respect to raising and rotation of the arm often significantly limits the activities of daily living including such simple actions as placing the arm behind the back or tucking in a shirt.

What causes frozen shoulder is unclear. Immobilization of the shoulder joint for some time, such as after surgery or an injury may increase the risk of occurrence. Other cases have had an insidious onset. The peak incidence of this disorder is between the ages 50 and 70 and it rarely occurs in individuals younger than 40 years of age. Women are slightly more predisposed than men. For unknown reasons this condition is more common in people with diabetes.

Frozen shoulder syndrome usually encompasses three stages: freezing, frozen and thawing. The first stage is associated with pain that is aggravated by movement. The freezing phase lasts two to four months, the frozen phase remains for three to six months and the thawing process may take up to a year or more to complete. The muscles of the shoulder girdle can atrophy (waste) the longer the disorder manifests itself.

Early treatment for early phases of frozen shoulder syndrome include massage and ice. Difficulty arises due to the fact that most patients fail to get care upon onset of symptoms. Primary goals are to increase motion and reduce pain. Therapies including ultrasound and electrical stimulation aid in reducing inflammation and help in pain control. The introduction of Low Intensity Laser Therapy has aided in the treatment of frozen shoulder syndrome. This therapy directly stimulates muscles and connective tissues to heal themselves through the use of controlled light exposure.

Anti-inflammatory medication may be prescribed by your medical physician to decrease pain or to help with sleep at night. Trigger point therapy to the area of the shoulder is also recommended so as to relieve stresses on surrounding tissues and structures and to increase circulation. Conservative manipulation (a force directed into the joint by the chiropractor) of the shoulder and neck once inflammation has subsided, helps in restoring proper joint motion and function. Your doctor should demonstrate a exercise program to gently stretch the shoulder. These exercises may include the use of a home pulley system and an elastic cord to increase motion of the shoulder.

In general, frozen shoulder will resolve with time and consistent compliance with the prescribed treatment program.

