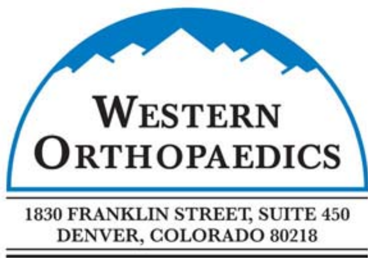


What is adhesive capsulitis?

Adhesive capsulitis is the technical term for "Frozen Shoulder". The shoulder joint is supported by ligaments which connect the shoulder bones together and keep them properly aligned when in motion. Normally, the ligaments are flexible enough to permit full movement of the shoulder. When adhesive capsulitis occurs, the ligaments develop an inflammatory process, causing them to be infiltrated with scar tissue and form very restricting adhesions. This "freezing" of the joint severely decreases the shoulder's normal range of motion and can cause a considerable amount of pain when motion is attempted.

Who is most at risk?

Women 40 years of age and older are most likely to develop frozen shoulder. Some medical conditions, such as diabetes, cardiovascular disease, or after breast surgery, can be associated with frozen shoulder, but the conditions can and often does occur in any normal individual, male or female, without any predisposing medical condition or trauma.

How do the symptoms develop?

Adhesive capsulitis progresses through three general phases. The symptoms of the first phase, or "freezing phase", is the insidious onset of generalized pain about the shoulder which is increased with movement, and results in loss of motion. It is felt that, because of the pain resulting from the inflammation, the patient elects to protect the shoulder by no moving it, thereby setting the stage for the scar tissue that binds the shoulder even tighter. The second phase, or "frozen phase", is distinguished by localized pain and tenderness about the humeral head (ball of the shoulder), and discomfort that seems to worsen at night and often interferes with sleep. During this phase, the inflammation is slowly subsiding and the scar tissue is maturing. The final phase, or "thawing phase", embodies a less painful shoulder but with significantly decreased range of motion. During this phase, the scar tissue may begin loosening up and shoulder motion can slowly return.

How is a diagnosis of adhesive capsulitis made?

The diagnosis of frozen shoulder is usually made by an orthopedic surgeon. The symptoms of shoulder pain are often confused with such things as calcific bursitis, rotator cuff tears, arthritis, or tendinitis. Although these more serious conditions are thought to sometimes precede adhesive capsulitis, in most cases, that is not necessarily true, and the condition is an isolated event. When the surgeon notices a decrease in shoulder motion, particularly in flexion and rotation, the diagnosis is suspect. When x-rays, MRI, and physical exam rule out other causes of pain, then the diagnosis is confirmed.

How is adhesive capsulitis treated?

The treatment of adhesive capsulitis depends on the stage and severity of the condition. Often, in the early stages, oral anti-inflammatory medications are helpful to decrease the joint inflammatory reaction, hopefully thereby decreasing the scar tissue formation by allowing more pain-free range of motion. In addition, physical therapy modalities, including phonophoresis (sometimes with cortico-steroids), ultrasound, and hot and cold treatments can be helpful. A physical therapist who is familiar with this condition is also very helpful in performing active-assisted and passive gentle manipulative range of motion activities. Frequently this is best done in a warm therapy swimming pool situation. A home exercise program, using overhead pulley and stretching activities with a cane or wand, must be included in the therapy program.

Pain or analgesic medicines are often necessary to help with the discomfort, particularly during the "frozen phase".

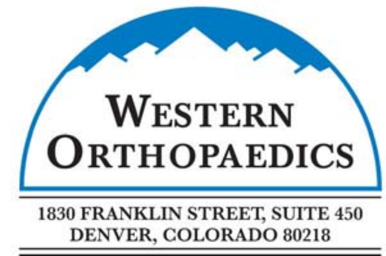
Surgery is rarely needed for adhesive capsulitis. Surgery begins with manipulation under anesthesia. In our practice, this is usually performed in the outpatient department. With the patient asleep, the physician attempts to manipulate the shoulder through a full range of motion to stretch the tight scar tissue surrounding the joint. In more serious cases, it is sometimes necessary to perform an arthroscopic exam to release additional adhesions. Following manipulation, the patient must continue physical therapy and home exercises. On occasion, tow or sometimes three manipulations are needed since the adhesions may reform if the inflammatory process remains active.

What is the long-term outlook for frozen shoulder?

Most cases of frozen shoulder eventually resolve, either spontaneously, or following physical therapy and sometimes manipulation. This condition does not lead to arthritis or rotator cuff tendon damage. Despite the fact that the shoulder is considerable disables for a prolonged period of time, within two years most cases of adhesive capsulitis have resolved. This is the most important thing for a patient to realize, and also, that the condition seldom returns to a joint once it has resolved.

If I have any further questions, who can I call?

Please feel free to call Western Orthopaedics at (303) 321-1333 and ask for a referral to the shoulder specialist. One of the physicians will be happy to answer your questions and evaluate your shoulder in the clinic. You may visit us at www.western-ortho.com.



Questions and Answers About Adhesive Capsulitis or “Frozen Shoulder”