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Patient Guide to Shoulder Instability

WHAT IS THE SHOULDER JOINT?

This is a ball and socket type of joint that permits a wide range of movement. Its bony structures include the upper arm bone (the humerus) and the shallow cavity (the glenoid) of the shoulder blade. While it is called a ball and socket joint, the shoulder looks more like a golf ball on a golf tee- a ball on a shallow dish like surface. The ball of the humerus (humeral head) is meant to stay close to the socket, like a ball bearing in a holder. The humeral head is held into the socket by the lining of the joint (the capsule), thickenings of the capsule called ligaments, and a cartilage rim (the labrum).

WHAT IS SHOULDER INSTABILITY?

While the shoulder has great range of motion, it can lose its stability and the humeral head can sometimes move out of the socket of the joint. This can happen due to a traumatic injury such as a fall or a direct hit to the arm while playing sports, or it can be due to insufficient stabilization from the capsule and rotator cuff muscles. The humeral head (ball) can move either partially (sublux) or completely (dislocate) out of the socket. The humeral head can dislocate or sublux forward (anterior), backward (posterior), or out the bottom of the joint (inferior). The most common patterns are anterior and both anterior and inferior. If it is the latter or goes out in more than one direction it is called multidirectional instability.

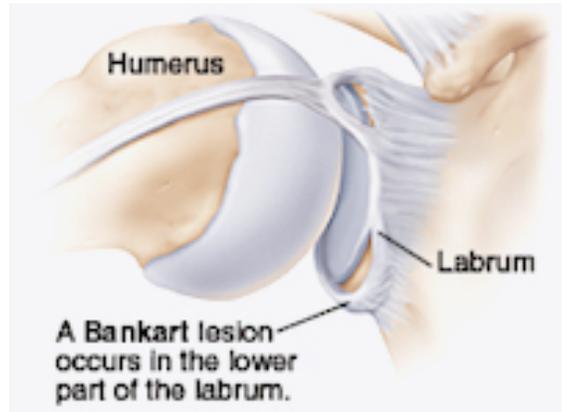


WHAT CAUSES SHOULDER INSTABILITY?

With significant trauma to a previously normal joint, the humeral head can be forcefully subluxed or dislocated. As stated above, this can occur during a fall on an outstretched arm or due to a sports injury. The capsule, ligaments, or labrum can be stretched, torn, or detached from the bone. When the humeral head is back in place (reduced) with each additional episode, further tissue damage can occur increasing the tendency towards future instability. The chance of repeat dislocations often depends on the age of first dislocation- the younger the patient is when they first dislocate their shoulder, the more likely they are to dislocate their shoulder again. Alternatively, some people are born with somewhat loose shoulder ligaments (they have a loose or spacious capsule). Instability can occur without any trauma or following relatively minor injury.

WHAT ARE THE SYMPTOMS IN INSTABILITY?

People with instability of the shoulder joint can sometimes feel the ball of the shoulder come out of its socket or “give way”. This is commonly associated with pain. Often, the episodes of “giving way” occur with specific activities or positions of the arm, such as with throwing a ball or reaching behind the body.



HOW IS SHOULDER INSTABILITY DIAGNOSED?

A complete history and physical examination should be done by a physician. The examination includes palpation to check for points of tenderness as well as a determination of range of motion and strength. The degree of shoulder looseness or laxity of the shoulder joint can also be assessed by specific tests during the examination. X-rays are usually done to obtain information about the possible causes of the instability and to rule out other causes of shoulder pain, such as a fracture.

Additional tests such as a magnetic resonance imaging scan (MRI) with dye in the joint (arthrogram) are often done to further evaluate the bones and tissues of the shoulder joint. However, these scans are not required in all patients with instability.

HOW IS SHOULDER INSTABILITY TREATED?

After a patient has dislocated their shoulder, it is important to rest the shoulder and avoid aggravating activities for a couple of days. Patients are usually placed in a sling or a shoulder immobilizer for their comfort for the first few weeks. Once the pain and swelling have subsided, physical therapy for range of motion exercises and gentle strengthening are started. Typically, the exercise program is done in conjunction with a trained physical therapist.

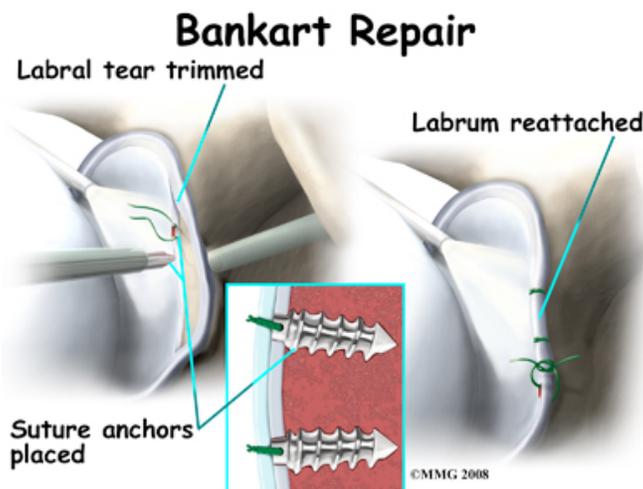
Applying cold packs or ice bags to the shoulder before and after exercise can help reduce the pain and swelling. NSAIDS (non-steroidal anti-inflammatory drugs) such as Motrin, Advil or Aleve can be used to reduce pain and swelling. You should check with your physician because a number of different kinds of drugs are available. They may have side effects and if you have questions you should consult your physician.

The goal of therapy is to restore shoulder motion and increase the strength of the rotator cuff muscles. By strengthening the rotator cuff, you can stabilize and help prevent the shoulder from re-dislocating or subluxing. Once you have full motion, no pain and full strength, you will be released to gradually return to activities.

WHEN WOULD I NEED AN OPERATION?

Despite a course of physical therapy in which full shoulder motion and strength are restored, the shoulder may still be loose or unstable. Treatment options then consist of 1) activity modification and 2) surgery. Activity modification is primarily an option for patients who experience instability only with certain activities such as playing basketball or overhead sports.

In these patients, avoidance of the activity can completely eliminate their episodes of subluxation or dislocation. Surgical treatment is considered in patients not willing to give up the activities or sports which provoke their episodes or in patients in whom instability occurs during routine daily activities (dressing, sleeping, etc) or work. The surgery includes examination of the shoulder under anesthesia to fully assess the extent and direction of the instability while the muscles surrounding the shoulder are completely relaxed.



An arthroscope is frequently used to inspect the inside of the shoulder joint and to evaluate the joint and its cartilage. The arthroscope allows direct assessment of the condition of the labrum and rotator cuff tendons. In a majority of patients it is possible to stabilize the shoulder by arthroscopic techniques. To correct severe instability or a revision instability repair, open surgery may be necessary. An incision is made over the front of the shoulder and the muscles are moved to gain access to the joint capsule, ligaments and labrum. These structures are then repaired, reattached, or tightened depending on the tissue injury identified at surgery. The repair can be done with simple sutures or with sutures attached to metal, plastic, or absorbable tacks or anchors. These anchors are inserted into the bone and hold the sutures that are used to reattach or tighten the ligaments. These anchors stay in the bone permanently.

HOW LONG DOES REHABILITATION AFTER AN OPERATION TAKE?

The course of recovery following surgery depends somewhat upon the type of procedure the surgeon performs. You will be in a sling full time for 4-6 weeks following the surgery. Usually, range of motion of the hand, wrist and elbow are begun the day after surgery. Most patients can move their wrist and hand and use the arm to eat, get dressed and even type on a computer as tolerated after surgery, most often within three to seven days after surgery. A supervised physical therapy program is initiated one to four weeks after the operation. Full range of motion usually returns after six to eight weeks. Strength usually returns in three months to six months. You may return to driving as soon as you are not taking any narcotics and you feel you can control the vehicle in case of an emergency. Return to work or sporting activities depends on the specific nature and demands of that activity, but can take up to six months to one year or more for heavy laborers or high level athletes. With surgery, the chance of recurrence of the instability is low (3 to 5%) and most patients can return to their previous activities.