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Shoulder Dislocation

Shoulder dislocation means that the shoulder joint is too loose and is able to slide around too much in the socket and may actually slip out of the socket.

If the shoulder slips completely out of the socket, it has become dislocated.

Is the commonest joint to get dislocated

Most common in young adult

Usual treatment is reduction under sedation

Recurrent dislocation is more common in young population

What parts of the shoulder are involved?

The shoulder is made up of **three bones**: the scapula (shoulder blade), the humerus (upper arm bone,) and the clavicle (collarbone).

The rotator cuff connects the humerus to the scapula. The **rotator cuff** is actually made up of the tendons of four muscles: the supraspinatus, infraspinatus, teres minor, and subscapularis.

A part of the scapula, called the glenoid, makes up the **socket of the shoulder**. The glenoid is very shallow and flat. A rim of soft tissue, called the labrum, surrounds the edge of the glenoid, making the socket more like a cup. The labrum turns the flat surface of the glenoid into a deeper socket that molds to fit the head of the humerus.

Surrounding the shoulder joint is a watertight sac called the joint capsule. The joint capsule holds fluids that lubricate the joint. The walls of the joint capsule are made up of ligaments. Ligaments are soft connective tissues that attach bones to bones. The joint capsule has a considerable amount of slack, loose tissue, so that the shoulder is unrestricted as it moves through its large range of motion. If the shoulder moves too far, the ligaments become tight and stop any further motion, sort of like a dog coming to the end of its leash.

Dislocations

90% all dislocations are anterior dislocations, meaning that the humerus slips out of the front of the glenoid.

Only three percent of dislocations are posterior dislocations, or out the back.

Sometimes the shoulder does not come completely out of the socket. It slips only partially out and then returns to its normal position. This is called subluxation.

What makes a shoulder become unstable?

Shoulder instability often follows an injury that caused the shoulder to dislocate.

This initial injury is usually fairly significant, and the shoulder must be reduced.

To reduce a shoulder means it must be manually put back into the socket. The shoulder may seem to return to normal, but the joint often remains unstable.

The ligaments that hold the shoulder in the socket, along with the labrum (the cartilage rim around the glenoid), may have become stretched or torn. This makes them too loose to keep the shoulder in the socket when it moves in certain positions.

An unstable shoulder can result in repeated episodes of dislocation, even during normal activities. Instability can also follow less severe shoulder injuries.

What problems does an unstable shoulder cause?

Chronic instability : Frequent subluxations or dislocations.

Commonly happens when the hand is raised above the head, for example while throwing. Subluxation of the shoulder usually causes a quick feeling of pain, like something is slipping or pinching in the shoulder.

The shoulder may become so loose that it starts to dislocate frequently. This can be a real problem, especially if you can't get it back in the socket and must go to the emergency room every time. A dislocated shoulder can damage the nerves around the shoulder joint.

If the nerves have been stretched, a numb spot may develop on the outside of the arm, just below the top point of the shoulder. Several of the shoulder muscles may become slightly weak until the nerve recovers. But the weakness is usually temporary.

What tests will my doctor run?

In the **physical exam**, your doctor will feel and move your shoulder, checking it for strength and mobility.

Looks for an apprehension sign. (Don't worry. Unless your shoulder is extremely loose, it will not dislocate.

Your doctor may order an **X-ray**. X-rays can help confirm that your shoulder was dislocated or injured in the past. Also helps in ruling out any associated fracture of the greater tuberosity

MRI is useful in assessing soft tissues: capsule, labrum etc

A surgeon may need to examine your shoulder using an **arthroscope** while you are under general anesthesia, which puts you to sleep.

This allows a good look at the muscles and ligaments of the shoulder. When you are awake, it is hard to test the ligaments because you automatically tighten the muscles during the exam.

What treatment options are available?

Nonsurgical Treatment

Manipulation of the joint and reduce dislocation under sedation and sometimes under General anaesthesia

This is followed by sling

Your doctor will probably have a physical or occupational therapist direct your rehabilitation program. At first, patients are shown ways to avoid positions and activities that put the shoulder at further risk of injury or dislocation. Overhand athletes may be issued a special shoulder strap or sleeve to stop the shoulder from moving in ways that strain it.

Your therapist may use heat or ice treatments to ease pain and inflammation. Hands-on treatments and various types of exercises are used to improve the range of motion in your shoulder and nearby joints and muscles.

Later, you will do strengthening exercises to improve the strength and control of the rotator cuff and shoulder blade muscles. Your therapist will help you retrain these muscles to keep the ball of the humerus in the socket.

Surgery

If your therapy program doesn't stabilize your shoulder after a period of time, you may need surgery. There are many different types of shoulder operations to stabilize the shoulder

1. Bankart Repair

The most common method of stabilizing an anterior dislocation

The Bankart repair involves sewing the ligaments, along with the labrum, on the front side of the joint back into their original position using anchoring stitches.

Some surgeons prefer to perform a similar operation using an arthroscope. Arthroscopes require smaller incisions, which means less time in the hospital and less time to heal.

2. Capsular Shift

Another surgery to tighten a loose shoulder joint is a procedure called a **capsular shift**. In this procedure, an incision is made on the front of the joint capsule to create a flap. The surgeon pulls the flap of tissue over the front of the capsule and sews it together. This is similar to when a tailor tucks loose fabric by overlapping and sewing the two parts together.

What should I expect after treatment?

Rehabilitation after surgery is more complex.

You will likely wear a sling to support and protect the shoulder for one to four weeks.

A physical or occupational therapist may direct your recovery program.

You should expect full recovery to take up to six months.

Active therapy starts three to four weeks after surgery. You use your own muscle power in active range-of-motion exercises. You may begin with light isometric strengthening exercises. These exercises work the muscles without straining the healing tissues.

At about six weeks you start doing more active strengthening. Exercises focus on improving the strength and control of the rotator cuff muscles and the muscles around the shoulder blade.

Overhand athletes (start gradually in their sport activity about three months after surgery. They can usually return to competition within four to six months.

What can go wrong?

5-10% recurrence after surgery

1% chance of infection

10% chance of shoulder stiffness

Nerve damage in less than 10% [Musculocutaneous nerve and radial N]