



# **DISLOCATED SHOULDER**

Maybe you were tackled in a "friendly" game of football on the weekend, and felt your shoulder give way in a burst of pain. Or it might have been a fall from a bicycle or a horse, landing you on your arm with a pop. Or perhaps you've just noticed over time that, in certain positions, your shoulder just didn't feel "solid", that it wasn't in the right place.

A shoulder dislocation is when the humeral head in your shoulder "pops out" of the glenoid socket.

The shoulder blade and humerus, or upper arm, form the glenohumeral joint. This is what you would normally think of as your 'shoulder joint'. The glenohumeral joint is a ball-and-socket joint, consisting of the head of the humerus, or upper arm, and the glenoid fossa, which is formed by a slightly hollowed portion of the end of the shoulder blade. The head of the humerus maintains very little contact with the glenoid itself during movement, however. Instead, the shoulder relies on a group of ligaments, muscles and tendons to help keep the humerus in the proper place, and to provide stability to the joint.

As the arm moves in any direction, these ligaments and muscles maintain the proper position of the humeral head in the socket. During forceful motion or injury, however, these tissues can be stretched or torn, and the head can "slip out" of the socket, or dislocate. Your doctor may also use the term "subluxate", meaning that it has only partially dislocated.

Dislocations are most commonly anterior, meaning that the head of the humerus slips forward out of the joint. An injury where the arm is turned outwards and away from the body, such as a fall sideways on the arm, can cause an anterior dislocation. Very occasionally a dislocation can be posterior, where the humeral head slips backwards out of the joint. This usually occurs from a different type of injury, in which the arm is struck while is rotated inwards.

If you have dislocated your shoulder, you will know it right away. It is extremely painful, and you will not be able to move it without making the pain even worse. Dislocation is one of the three most common orthopaedic emergencies. The tendency will be for you to want to hold it outwards if you have dislocated it anteriorly. If it is dislocated posteriorly, the tendency will be to want to hold your arm close to your body, rotated inwards. Your doctor will also be able to see a noticeable deformity in the shape of the joint through the skin.

A related problem that can occur either after an initial injury or because of another problem in the joint is <u>glenohumeral instability</u>. This refers to a condition in which the humeral head repeatedly slips out of the joint, or seems to nearly slip out.

### Causes of a Dislocated Shoulder

Shoulder dislocations usually occur after a single traumatic injury that entails falling or getting hit on your shoulder. Contact sports like football, hockey, and rugby often include players who suffer from shoulder dislocations.

Unfortunately, once you've dislocated your shoulder, the chances are high that it will happen again, particularly if you are under age 30. That makes it all the more important that you follow your doctor's healing and rehabilitation program carefully.

## Symptoms of a Dislocated Shoulder

The first and foremost symptom is pain. Other symptoms include:

- Deformity of the joint
- Swelling around the joint
- Bruising of the skin around the joint
- Displaced bones may cause damage to the surrounding nerves, tendons and blood vessels

In addition to the pain, you may experience numbress in your upper arm, and weakness of the muscles around the shoulder.

Patients with glenohumeral instability report that their shoulder continually slips out of joint, especially when they throw something, or possibly bump into something.

## Treatments of a Dislocated Shoulder

Treatment of a dislocated shoulder requires putting the humeral head back into the socket, or "reducing" the shoulder. This sounds easier than it is, however. Once dislocated, it requires a specific amount of focused force on the bones in order to realign them. The doctor may give you a pain reliever or sedative to relax the muscles. This will make it easier to manipulate the joint back into position. If the joint has been out for hours, a general anesthetic may be needed.

When you see your doctor, the first thing he will do is to take a complete history. This includes when and how the pain started, whether it was the result of an injury and what type. He will then do a physical examination, to see exactly where the pain is located and whether there your range of motion is limited. If your shoulder is dislocated, that range of motion will be extremely limited and painful.

If the joint is merely subluxated, however, meaning that it has slipped out of joint but not completely, some of the signs of dislocation will not be present. Instead, certain movements may trigger the same feeling of instability.

To confirm a diagnosis of dislocation, your doctor will then order x-rays to see the position of the bones. These must be taken at several different angles in order to completely visualize the joint. Another x-ray will be done after the shoulder is put back into position, in order to confirm that it is correctly in place.

After the reduction or relocation of the dislocation, the pulse and sensation of the skin over the shoulder will be observed and recorded and the shoulder will be protected with some type of sling until sufficient time for soft tissue healing has occurred.

Another diagnostic test that is sometimes used is an arthrogram. In this test, a special kind of dye is injected into the joint, and then an x-ray of the joint is taken. Leaking of the dye into other structures can indicate other problems, like a tear in the rotator cuff.

An MRI, or magnetic resonance imaging test, can also be done to assist in making a complete diagnosis. This type of test uses magnetic waves to "slice" through the body, providing images at angles that would not be possible through x-rays. MRI scans also are able to show soft tissues, whereas x-rays only allow bones and the spaces between them to be visualized.

There are many different reduction techniques your doctor may use in order to get your shoulder back into position. The more common one involves the use of two people, one standing on either side of you while you lay on your back. The person on the opposite side from your affected shoulder will wrap a wide strap or sheet around your upper body and hold it tightly, or wrap it around their own waist for greater stability. This keeps your torso from moving as traction is applied to your arm. The person standing on the other side then applies gentle traction by either grasping your arm and gently leaning backwards, or by using another sheet wrapped around your arm and their waist, to maintain a better grip. If necessary, your arm may be rotated a bit as traction is applied, in order to help coax the bones into position.

Another technique can be done as you lay on your stomach, with your arm hanging off the table, and 10-15 lbs. of weights attached, pulling your arm straight down. Your doctor will then place pressure on the front of your shoulder until the humeral head slips back into the joint.

Your doctor will order x-rays after the reduction, to be sure that the bones are in the correct position. It will be important to keep your shoulder immobile for some time to allow the ligaments and muscles to heal. There is only one first dislocation and reduction; this is the best time to get it healed properly.

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