

# Shoulder Instability

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The shoulder is a very unique joint, and it is prone to a great number of injuries. The bony anatomy consists of the humerus, which is the ball, and the glenoid, which is part of the scapula, commonly referred to as the wing bone. It is a very shallow ball and socket joint. The head has little contact with the small socket and can easily slide out, which indicates that the shoulder is an unstable joint. The rest of the shoulder is formed by ligaments connecting bony components of the socket and the cartilage around the small rim of the socket (glenoid labrum). Ligaments and tendons hold the shoulder together. These ligaments give the shoulder some restraint from excessive movement in any one direction. The shoulder socket is covered by a capsule, which keeps the lubricating fluid within the shoulder joint.

The shoulder bones are held together by a group of muscles that you often read about in the sports pages, the rotator cuff muscles. These muscles are responsible for fine movement of the shoulder, such as throwing or catching a ball. The rotator cuff is made up of four muscles, which begin on the wing bone and continue on as tendons to insert on the ball. This gives the shoulder its stability, i.e. holding the ball within the socket.

Sports in which you bring your arm over your head-such as baseball, tennis, volleyball and swimming-are the main contributors to overuse injuries of the shoulder. When the shoulder joint is brought above a line parallel to the ground, it can become stressed in this overhead position. This is commonly referred to as a problem with the rotator cuff or impingement.

As a result of the shoulder's shallow socket, weakness of the rotator cuff or damage to the O-ring surrounding the socket (glenoid labrum) makes it easy for the head of the shoulder to slide part way out of the socket. This is called a partial dislocation or subluxation. The shoulder may also slide all the way out which is a full dislocation. Both are examples of shoulder instability.

Shoulder instability (looseness) can occur because of a previous trauma, stressful repetitive movements, or a genetic origin. The patients usually complain their shoulder has popped out then popped back in. Occasionally, a dislocated shoulder needs to be reduced at the time of the injury or subsequently in the emergency room.

The standard treatment for a subluxed shoulder is rest, but that needs to be followed by a rotator cuff strengthening program to strengthen the rotator cuff muscles to prevent further slipping.

If patients have persistent slippage and dislocation with a failure of strength during a rehabilitation program, then surgical stabilization methods need to be performed. Surgery in certain patients can be performed by arthroscopic methods (i.e. a telescope to look into your joint). Small instruments used to repair damaged structures may be needed. This has traditionally been done with open surgery and incisions on the front of the shoulder to reconstruct the weak shoulder joint; however, new techniques are being developed where this procedure can be done arthroscopically.

Once your Orthopedic Center of Illinois physician discusses the plan and treatment on an individual basis, a decision can be made as to whether or not rehabilitation, arthroscopic or open surgical procedures are needed.