Shoulder Multidirectional Instability

Common Questions

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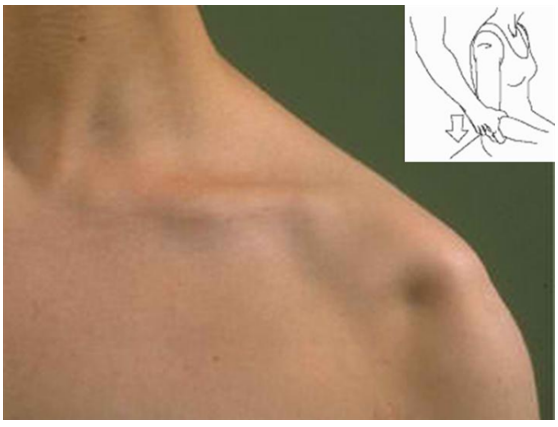
More information can be found on
Dr. Stetson's website at www.sportsmedicinedr.com

What is shoulder multidirectional instability?

Shoulder instability develops in two different ways. It can be either a traumatic onset which is related to a sudden injury or atraumatic which is not related to a sudden injury. Understanding the differences is essential in choosing the best course of treatment. As a rule, the patient with atraumatic onset instability has general laxity or looseness in the joint that eventually causes the shoulder to become unstable, whereas traumatic onset instability begins when an injury causes a shoulder to develop recurrent or repeated dislocations. Atraumatic shoulder instability is also called multidirectional instability and is described as laxity of the shoulder's glenohumeral joint in multiple directions.



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What is atraumatic shoulder instability?

Atraumatic shoulder instability develops in patients who have increased looseness of the supporting ligaments that surround the shoulder's glenohumeral joint. The laxity can be a natural condition present from birth or a condition that has developed over time. Many patients with multidirectional instability are active in overhead sports such as gymnastics, swimming, or throwing that repetitively stretch the shoulder capsule to extreme ranges of motion.

Why does multidirectional instability affect the shoulder joint?

The glenoid or the socket of the shoulder joint is a relatively flat surface that is deepened slightly by the labrum**,** a cartilage cup that surrounds part of the head of the humerus. The labrum acts as a bumper to keep the humeral head firmly in place in the glenoid. It is also the attachment point for important ligaments that stabilize the shoulder. These ligaments often become stretched out with multidirectional instability, allowing dislocation or subluxation of the shoulder joint to occur**.** The increased motion of the joint can lead to repetitive microtrauma or small injuries to the ligaments, producing tears of the labrum or rotator cuff.

Does multidirectional instability only affect the shoulder joint?

Multidirectional instability patients will often have increased ligament laxity in many joints. Hyperextended knees, elbows, and a self-described history of being "double-jointed" are common. These patients often have multidirectional laxity in both shoulders. Because many athletes with multidirectional instability are quite successful in their sports, there is a debate about whether laxity improves performance or is caused by repetitive stretching during athletic activity.

What are the signs and symptoms of multidirectional instability) or atraumatic shoulder instability?

Patients will often complain of apprehension about performing certain daily activities with their shoulder because the shoulder repeatedly subluxes or slips out of the socket which can be painful. Patients may sense that something is not quite right with the shoulder during activities when the arm is in certain positions. Patients may also show signs of inflammation in their shoulder joint and the surrounding ligaments, muscles and tendons.

How is atraumatic shoulder instability diagnosed?

A thorough history and physical examination are the keys to the diagnosis and treatment of multidirectional Instability. Most patients have a history of generalized ligamentous laxity of their joints. They often have no history of a forceful dislocation of their shoulder but rather a history of recurrent episodes of the shoulder slipping in and out of the socket. The patient's history may reveal a recent injury, an obvious dislocation, or a change in sport or training that has led to instability in a previously healthy shoulder. A general examination of joint mobility is very helpful. The diagnosis of multidirectional instability should be based on this result combined with

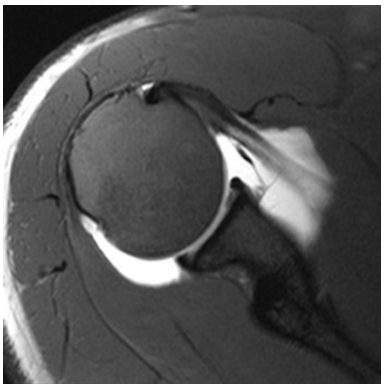
the evaluation of overall shoulder motion and the symptoms triggered when the doctor moves the arm in several directions.

If I have multidirectional instability, will I need x-rays?

X-rays are always recommended to rule out any associated injuries that would require treatment. Occasionally the images may reveal another problem with the shoulder that may be contributing to the instability.

If I have multidirectional instability, will I need an MRI?

An MRI of the shoulder can reveal other sources of the shoulder pain besides just ligamentous laxity that may require more than a rehabilitation program alone for successful treatment.

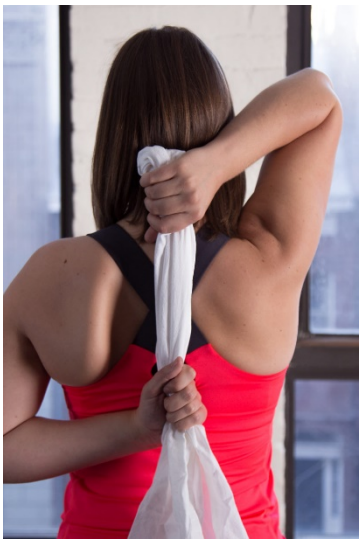


How is multidirectional instability treated without surgery?

The treatment for multidirectional instability is individualized for each patient. Most patients with MDI can be treated non-operatively with a physical therapy program that emphasizes muscular rehabilitation. Rehabilitation focuses on strengthening the rotator cuff muscles and periscapular muscles or those around the scapula. Strengthening these muscles provides dynamic stability to the joint, which is especially important when the static stability provided by the ligaments is lacking.

Can a physical therapy program help my shoulder multidirectional instability?

The vast majority of patients who follow a rehabilitation program diligently for at least six months will achieve pain relief**.** Those who continue with a daily or weekly exercise program as outlined by the doctor are most likely to have a successful recovery.



What if I am an athlete with shoulder multidirectional instability?

Athletes may also benefit from sport-specific rehabilitation that includes technique evaluation and modification. Often this type of program can help eliminate faulty technique that may have led to the development of symptoms.

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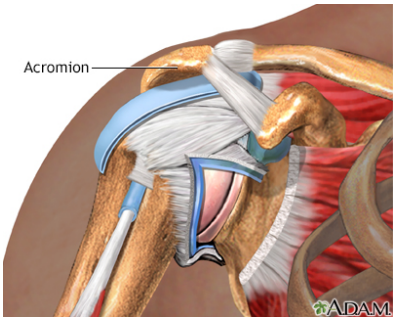
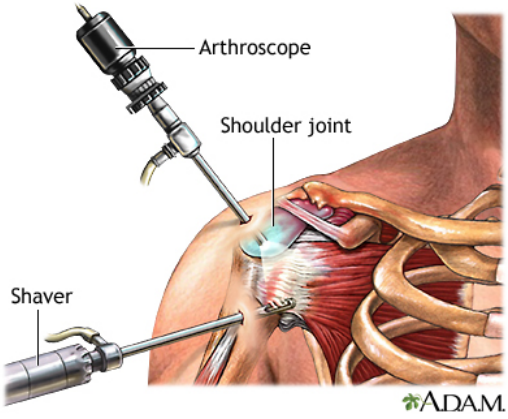
Can open surgery help a shoulder with multidirectional instability?

The traditional open surgery for multidirectional instability is designed to make the joint capsule smaller and reduce glenohumeral movement. This open surgical procedure is called an inferior capsular release and imbrication**.** Because this is an open surgery, there can be a substantial loss of motion with this procedure and athletes may not be able to return to competition after surgery.



How about arthroscopy surgery for a shoulder with multidirectional instability?

An arthroscopy allows the surgeon to visually evaluate the structures of the glenohumeral joint using a tiny instrument called an arthroscope which is a fiberoptic instrument with a light at the end. With arthroscopy, a capsular plication using small instruments and sutures can reduce the size of the joint capsule. In the right patient and if the surgery is done correctly, the patient may go on to achieve a pain free shoulder with a rehabilitation program.



What types of complications may occur with surgery?

The most common complication following surgery for multidirectional instability is recurrent instability, even with carefully chosen patients. Post-operative stiffness and loss of motion are also complications.

What if I have any other questions?

If you have any other questions, more information can be found on Dr. Stetson's website at www.sportsmedicinedr.com or just call Dr. Stetson's office, we are always happy to answer any questions you may have.

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