

Shoulder Conditions: MULTIDIRECTIONAL INSTABILITY OF THE SHOULDER (MDI)

Shoulder instability occurs when the upper-end of the arm bone, known as the humerus, slides partially or completely out of the shoulder socket. The disorder is classified by how much the humerus moves and the direction of the movement:

- Subluxation-The humeral head moves part way out of the shoulder socket.
- Dislocation-The humeral head moves completely out of the socket.
- Anterior-The humeral head moves toward the front.
- Posterior-The humeral head moves toward the back.
- Multidirectional



Causes

Shoulder instability often results from injury. Multi-directional instability may be from repetitive injury or from congenital ligamentous laxity.

Risk Factors

Factors that increase the risk of shoulder instability include:

- Previous shoulder dislocation
- Athletic activity, especially:
 - Baseball-pitching
 - Football-tackling
 - Tennis
 - Gymnastics

- Weight-lifting
- Any collision or contact sport
- Volleyball
- Swimming, especially backstroke or butterfly
- Congenital collagen disorders, such as:
- Marfan syndrome-a connective tissue condition
- Ehlers-Danlos syndrome–a condition in which patients have loose joints
 Hereditary conditions

Symptoms

Symptoms may come on suddenly or develop over time. Symptoms may include:

- Pain in the shoulder area
- Shoulder or arm weakness
- Shoulder may feel loose
- Shoulder may slip out of place
- Numb feeling down the arm



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Diagnosis

You will be asked about your symptoms and medical history. A physical exam will be done. Special attention will be given to your shoulders. Your doctor will determine your range of motion and try to move the humeral head within the socket. Your shoulder may need to be viewed internally. This can be done with:

- X-rays
- MRI scan
- CT scan
- Arthroscopy

Treatment

NON-SURGICAL TREATMENT will focus on reducing the strain at the shoulder in a downward or backward position during functional task performance. The therapist will likely present a number of restricted motions and ways to perform functional daily tasks without putting strain on the ligaments. In the case of a painful shoulder, the therapist will recommend anti-inflammatory techniques and positions of the shoulder at night and during sustained or repetitive task performance. The therapist will recommend strengthening exercises to the support muscles in order to improve safe reach and reduce the risk of recurrent dislocation.

FOLLOWING A SURGICAL PROCEDURE, the therapist will work closely with the surgeon to determine the safe motion patterns and range of motion. If the arm is kept still too long, the tightening procedure that was performed could limit the motion too much. If the shoulder is allowed to move too quickly, the ligaments could stretch back out and continue to cause the MDI.

Prevention

Guidelines to help protect the shoulder from injury include:

- Doing regular exercises to strengthen the supporting muscles
- Using proper athletic training methods
- · Increasing the duration or intensity of your exercises gradually
- · Modifying activities to prevent excessive external rotation and overhead motions of the shoulder

references provided online