Shoulder Mobility "Reaching" Movement Pattern Test

Purpose

The shoulder mobility "reaching" movement pattern demonstrates the natural complementary rhythm of the scapular-thoracic region, thoracic spine and rib cage with reciprocal upper extremity shoulder movements. Although the full reciprocal reaching pattern is not seen in basic activities and exercise it uses each segment to its maximal range ability, leaving little room for compensation. By removing compensation a clear view of limited movement ability is observed. The cervical spine and surrounding musculature should remain relaxed and neutral and the thoracic region should have a natural complimentary extension prior to the alternate upper extremity patterns. This movement pattern observes bilateral shoulder range of motion, combining extension internal rotation and adduction on one extremity and flexion, external rotation and abduction in the other.

Description

The tester first determines the hand length by measuring the distance from the distal wrist crease to the tip of the third (longest) digit. The individual is instructed to make a fist with each hand, placing the thumb inside the fist. They are then asked to assume a maximally adducted, extended and internally rotated position with one shoulder, and a maximally abducted, flexed and externally rotated position with the other. During the test the hands should remain in a fist and they should be placed on the back in one smooth motion. The tester then measures the distance between the two closest bony prominences. Perform the shoulder mobility test as many as 3 times bilaterally. If one repetition is completed successfully there is no reason to perform the test again.

Clearing exam

There is a clearing exam at the end of the shoulder mobility test. This movement is not scored it is simply performed to observe a pain response. If pain is produced a positive is recorded and a score of zero is given to the entire shoulder mobility test. This clearing exam is necessary because shoulder impingement can sometimes go undetected by shoulder mobility testing alone.
Tips for testing:

- The flexed shoulder identifies the side being scored - this simply represents the pattern and does not imply the functional ability of a body part or side. Always remember you are screening patterns, not parts.
- If the hand measurement is exactly the same as the distance between the two points then score low.
- If positive, the clearing test overrides the score on the rest of the test.
- Make sure the individual does not try to "walk" the hands toward each other following the initial placement.
Shoulder Mobility Testing Procedure

III  • Fists are within one hand length

II  • Fists are within one and a half hand lengths

I  • Fists are not within one and half hand lengths

The individual places his/her hand on the opposite shoulder and then attempts to point the elbow upward. If there is pain associated with this movement, a score of zero is given. It is recommended that a thorough evaluation of the shoulder be done. This screen should be performed bilaterally. If the individual does receive a positive score, both scores should be documented for future reference.

0 - The athlete will receive a score of zero if pain is associated with any portion of this test. A medical professional should perform a thorough evaluation of the painful area.
Implications for the Shoulder Mobility Movement Pattern Test

The ability to perform the shoulder mobility test requires shoulder mobility in a combination of motions including abduction/external rotation, and flexion (upper arm). It also requires adduction/internal rotation, and extension (lower arm). The test challenges glenohumeral mobility, dynamic scapular stability and thoracic spine mobility and dynamic stability.

Poor performance during this test can be the result of several factors. The most obvious, is the widely accepted explanation that increased external rotation is gained at the expense of internal rotation in overhead throwing athletes. Although this is true to some extent this is not the first thing to consider. Scapular stability is dependent on thoracic mobility and therefore should be the primary focus. Excessive development and shortening of the pectoralis minor, latissimus dorsi, rectus abdominus muscles can cause postural alterations of forward or rounded shoulders. This postural problem leaves the glenohumeral joint and scapula at a disadvantage for full, unrestricted mobility. A scapulothoracic dysfunction may be present, resulting in decreased glenohumeral mobility secondary to poor scapulothoracic mobility or stability. The test requires a asymmetric bilateral reaching pattern coupled with postural control and core stability.
## Shoulder Mobility

### Score of 3

**Maintenance**
- Dead Lift Progressions
- Chop/Lift Progression
- Push-Up Progressions

### Score of 2

**Stretches**
Recommended not mandatory

**Corrective Exercise**
- Wall Sit w/ Shoulder Press
- Sidelying Torso Twist w/ Shoulder ROM (forearm flat)
- Trunk Rotation

### Score of 1

**Stick Work**

**Partner Stretch**
- Traction w/ Int/Ext Rotation
- Trunk Rotation