

APLEY'S SCRATCH TEST FOR SHOULDER MOBILITY

Objective:

To assess simultaneous movements of the shoulder girdle (primarily the scapulothoracic and glenohumeral joints).

Movements include:

- Shoulder extension and flexion
- Internal and external rotation of the humerus at the shoulder
- Scapular **abduction** and adduction

Instructions:

- Explain the purpose of the test and allow a warm-up if necessary (e.g., forward and rearward arm circles).
- Shoulder flexion, external rotation, and scapular abduction
 - ✓ From a sitting or standing position, the client raises one arm overhead, bending the elbow and rotating the arm outward while reaching behind the head with the palm facing inward to touch the medial border of the contralateral scapula or to reach down the spine (touching vertebrae) as far as possible.
 - ✓ The client should avoid any excessive arching in the low back or rotation of the torso during the movement.
 - ✓ Have the client repeat the test with the opposite arm.
- Shoulder extension, internal rotation, and scapular adduction
 - ✓ From a sitting or standing position, the client reaches one arm behind the back, bending the elbow and rotating the arm inward with the palm facing outward to touch the inferior angle of the contralateral scapula or to reach up the spine (touching vertebrae) as far as possible.
 - ✓ The client should avoid any excessive arching in the low back or rotation of the torso during the movement.
 - ✓ Have the client repeat the test with the opposite arm.

Observations:

- Note the client's ability to touch the medial border of the contralateral scapula or how far down the spine he or she can reach with shoulder flexion and external rotation.
- Note the client's ability to touch the opposite inferior angle of the scapula or how far up the spine he or she can reach with shoulder extension and internal rotation.
- Observe any bilateral differences between the left and right arms in performing both movements.

General interpretations:

- Use the information provided in Table 7-16 to determine the limitation(s) in this flexibility test.

Apley's scratch test: Shoulder flexion, external rotation, and scapular abduction



Apley's scratch test: Shoulder extension, internal rotation, and scapular adduction



Interpretation of Apley's Scratch Test

Movement/Limitation	Shoulder Mobility*
Ability to touch specific landmarks	Good shoulder mobility
Inability to reach or touch the specific landmarks or discrepancies between the limbs	Requires further evaluation to determine the source of the limitation (i.e., which of the movements is problematic) <ul style="list-style-type: none">• Shoulder flexion and extension• Internal and external rotation of the humerus• Scapula abduction and adduction

*Tightness of the joint capsules and ligaments may also contribute to limitations. It is common to see greater restriction on the dominant side due to increased muscle mass.

Source: Kendall, F.P. et al. (2005). *Muscles Testing and Function with Posture and Pain* (5th ed.). Baltimore, Md.: Lippincott Williams & Wilkins.