Shoulder Orthopedic Tests
Supraspinatus tendinitis is a common inflammatory condition of the shoulder that causes anterior shoulder pain.

- Pain is present especially in abduction.
- The painful arc is between 60° and 90° of abduction.
Tendinitis (Supraspinatus)

- Clinical Signs and Symptoms
  - Anterolateral shoulder pain
  - Pain sleeping on the affected side
  - Stiffness
  - Catching of the shoulder during use
  - Pain on active and passive range of motion
  - Local tenderness
Supraspinatous Tendinitis Test

- Procedure: Patient seated. Abduct the arm to 90° with the arm between abduction and forward flexion. Abduct against resistance.

- Positive Test: Pain or weakness over the insertion of the supraspinatous tendon may indicate tendinitis or tear. Pain over the deltoid may indicate a strained deltoid muscle.
Supraspinatous Tendinitis Test
Apley Scratch Test

- **Procedure:** Patient seated. Place hand of affected shoulder behind head to touch superior angle of opposite scapula. Place hand behind back to touch inferior angle of opposite scapula.

- **Positive Test:** Pain indicates tendinitis of the tendons of the rotator cuff, usually the supraspinatous tendon.
Apley Scratch Test
Neer Impingement Test


Positive Test: Shoulder pain and a look of apprehension on the patient’s face indicate a positive sign. This suggests overuse injury of the supraspinatous muscle or biceps tendon.

Structures affected: This movement jams the greater tubercle of the humerus against the anterior inferior border of the acromion, thus irritating the tendon.
Neer Impingement Test
Tendinitis (Bicipital)

- The biceps brachii has two heads, the long and the short.
- The long head travels over the superior aspect of the humeral head.
- The long head is the tendon affected by bicipital tendinitis.
Tendinitis (Bicipital)

- Clinical Signs and Symptoms
  - Anterior shoulder pain
  - Pain on palpation of the bicipital groove.
  - Pain on active and passive elbow flexion and extension.
Biceps Tendon
Procedure: Patient seated with elbow extended, supinated, and the shoulder flexed forward to 45°. Place your fingers in the bicipital groove and your opposite hand on the patient’s wrist. Instruct the patient to elevate the arm forward against resistance.

Positive Test: Pain or tenderness in the bicipital groove.
Speed’s Test
Lippman’s Test

- Procedure: Patient seated. Elbow flexed to 90°. Stabilize the elbow with one hand and with the other palpate the biceps tendon and move it from side to side within the bicipital groove.

- Positive Test: Pain indicates bicipital tendinitis. Apprehension may indicate a subluxation or dislocation of the tendon out of the groove or a rupture of the transverse humeral ligament.
Lippman’s Test
Bursitis

- The subacromial bursa overlies the rotator cuff tendons.
- Usually bursitis is associated with tendinitis of the adjacent supraspinatus tendon.
- Common causes of bursitis are trauma, overuse, repeated multiple traumas, and improper executed activity.
Bursitis

- Clinical Signs and Symptoms
  - Anterolateral shoulder pain
  - Pain sleeping on the affected side
  - Stiffness
  - "Catching" of the shoulder during use
  - Pain on active and passive range of motion
  - Local tenderness
Subacromial Bursa
Subacromial Push-Button Sign

- Procedure: Patient seated. Apply pressure to the subacromial bursa.
- Positive Test: Local pain suggests inflammation of the subacromial bursa (bursitis).
Subacromial Push-Button Sign
Anterior Glenohumeral Instability

- Anterior shoulder instability is the major cause of dislocations.
- This is due to weakness of the anterior structures of the glenohumeral joint: the anterior capsule, glenohumeral ligaments, rotator cuff tendons, and glenoid labrum.
- The most common cause of shoulder dislocation is a fall on an outstretched arm.
Anterior Glenohumeral Instability

- Clinical Signs and Symptoms
  - Painful arc (if dislocated)
  - Feeling of shoulder slippage
  - Apprehension on movement
  - Crepitus on movement
  - Increased shoulder girth (if dislocated)
Anterior Apprehension Test

- **Procedure:** Patient seated. Abduct the affected arm to 90° and externally rotate it *slowly* while stabilizing the posterior aspect of the shoulder with the opposite hand.

- **Positive Test:** Local pain indicates chronic anterior dislocation. It may elicit a look of apprehension on the patient’s face. The patient may report that the test feels the same as when the shoulder was dislocated.
Anterior Apprehension Test
Dugas Test

- Procedure: Patient seated. Instruct him to touch the opposite shoulder and bring the elbow to the chest wall.

- Positive Test: Inability to touch the opposite shoulder because of pain indicates anterior dislocation of the humeral head.
Dugas Test
Posterior Glenohumeral Instability

- Posterior glenohumeral dislocation accounts for only 5% to 10% of shoulder dislocations.
- The head of the humerus dislocates posteriorly and is found behind the scapula.
- This is caused by trauma to the anterior aspect of the shoulder that forcefully drives the humeral head posterior.
Posterior Glenohumeral Instability

- Clinical Signs and Symptoms
  - Painful arc (if dislocated)
  - Feeling of shoulder slippage
  - Apprehension on movement
  - Crepitus on movement
  - Increased shoulder girth (if dislocated)
Posterior Apprehension Test

• Procedure: Patient supine. Forwardly flex and internally rotate the shoulder. Apply posterior pressure on the elbow.

• Positive Test: Local pain or discomfort and a look of apprehension on the patient’s face indicates chronic posterior shoulder instability. The patient may report that the test feels the same as when the shoulder was dislocated.
Posterior Apprehension Test
Rotator Cuff Instability

• Rotator cuff instability involves partial or complete tearing of one of the tendons of the rotator cuff.

• Usually the supraspinatous tendon is involved.

• Rotator Cuff Muscles
  – Supraspinatus
  – Infraspinatus
  – Teres Minor
  – Subscapularis
Rotator Cuff Instability

- Clinical Signs and Symptoms
  - Severe anterior lateral shoulder pain
  - Pain when sleeping on the affected side
  - Stiffness
  - “Catching” of the shoulder during use
  - Pain on active and passive range of motion
  - Localized tenderness
  - Unable to abduct shoulder
Drop Arm Test

- Procedure: Patient seated. Abduct the arm past 90°. Instruct the patient to lower the arm slowly.

- Positive Test: If the patient cannot lower the arm slowly or if it drops suddenly, this indicates a rotator cuff tear, usually of the supraspinatus.
Drop Arm Test
Supraspinatous Test

• Procedure: Instruct the patient to abduct the arm to 90°. Grasp the patient’s arm and press down against resistance by the patient. Next, rotate the shoulder internally so the thumb points down. Press down against resistance.

• Positive Test: Weakness or pain may indicate a tear of the supraspinatus muscle or tendon. It may also indicate suprascapular neuropathy.
Supraspinatous Test
Biceps Tendon Instability

• The biceps brachii has two heads: long and short.

• The long head traverses the bicipital groove.

• A shallow bicipital groove or a lax or ruptured transverse humeral ligament may snap the biceps tendon into and out of the bicipital groove.

• This will cause anterior shoulder pain with point tenderness at the bicipital groove.
Biceps Tendon Instability

- The painful snap may also indicate a tear of the biceps tendon.

- A bicipital tendon tear will cause swelling and ecchymosis near the bicipital groove and a characteristic bulging of the belly of the biceps muscle near the antecubital fossa (Popeye sign).
Bicipital Tendon
Biceps Tendon Instability

- Clinical Signs and Symptoms
  - Anterior shoulder pain
  - Stiffness
  - Pain on active and passive range of motion
  - Localized tenderness
  - Bulging of biceps muscle (complete tear)
Yergason’s Test

• Procedure: Patient seated with elbow flexed to 90. Stabilize the patient’s elbow with one hand. Grasp the patient’s wrist and have him externally rotate the shoulder and supinate the forearm against resistance.

• Positive Test: Local pain or tenderness in the bicipital tendon indicates an inflammation of the biceps tendon or tendinitis. If the tendon pops out of the bicipital groove, suspect a lax or ruptured transverse humeral ligament or a congenital shallow bicipital groove.
Yergason’s Test
Abbott-Saunders Test

- Procedure: Patient seated. Abduct and maximally rotate the arm externally. Lower the arm to the patient’s side while palpating the bicipital groove with your opposite hand.

- Positive Test: A palpable or audible click at the bicipital groove indicates subluxation or dislocation of the bicipital tendon. This is caused by a ruptured transverse humeral ligament or a congenital shallow bicipital groove.
Abbott-Saunders Test