EXAMINATION OF THE SHOULDER
Please see RheumTutor.com for video demonstration

INSPECTION (SEADS)

Swelling (especially joints)
- Sternoclavicular
- Acromioclavicular
- Glenohumeral (bulge at delto-pectoral groove may occur in very large effusions

Erythema

Atrophy
- Pectoralis major
- Deltoid (causing squaring of shoulder)
- Supraspinatus and infraspinatus
- Trapezius

Deformities
- Step-deformity of the clavicle (prior fracture)
- Step-deformity of acromioclavicular joint (AC ligament disruption)
- Asymmetrical height of shoulders
  - May be from scoliosis or Sprengel’s deformity (high riding scapula)
- Winging of scapula
  - Ask the patient to “do a push up against wall”
  - Winging is caused by injury of long thoracic nerve and paralysis of serratus anterior muscle

Symmetry, skin changes

PALPATION

Palpate the sternoclavicular, acromioclavicular and glenohumeral joints for warmth
Then systematically palpate the bones and soft-tissue structures for tenderness
- SC joint, clavicle, coracoid process, AC joint, acromion, spine of scapula
- Trapezius, supraspinatus, infraspinatus, deltoid, triceps, biceps muscles
- Long and short head of biceps
- Rotator cuff insertion on greater tuberosity of humerus
  - (extend arm backwards to bring humerus out from under the acromion)

Palpate for crepitus during shoulder movement

RANGE OF MOVEMENT (ROM)

In general, the patient is instructed through active ROM first, followed by passive ROM if active is limited. However, one can integrate both, especially at terminal ranges of movement.

Active ROM

Abduction (180°)

Look for painful arc (pain typically between 60-120 degrees).
Found in subacromial impingement, subacromial bursitis, supraspinatus tendonitis. If pain begins beyond 120 degrees, this may indicate AC joint pathology

Scapulothoracic Rhythm

First 30°: movement at glenohumeral joint. Beyond 30°, scapula engages with a 2:1 ratio of glenohumeral : scapulothoracic movement. With adhesive capsulitis, the humerus and scapula move together as a complex
Adduction
Cross arms in front of body

Flexion (180°)

Extension (60°)

External Rotation
Arms at sides, flex elbows to 90°, rotate forearms away from body
Normal is 45-90° in this position

Internal Rotation
Arms at sides, flex elbows to 90°, rotate forearms into body and behind back. Normal up to 120°

Apley Scratch Test: ask patient to touch tip of opposite scapula

Passive ROM
Perform if active range of motion is restricted
Adhesive capsulitis will result in global restriction in all fields of movement
Check for crepitus (hand over shoulder, move arm around)

POWER ASSESSMENT (see video)
This is best done by resisted isometric testing, with patient resisting examiner’s force
With arms at side, elbow flexed to 90°, assess flexion and extension.
Abduction and adduction may be performed together, with arms abducted from the sides at approximately 20°.

SPECIAL TESTS

Supraspinatus tear
Drop Arm Test
Assessed during abduction as patient actively brings arm back to sides from an overhead abducted position. If arm suddenly drops to side, this indicates a torn supraspinatus. Alternatively, with the arm abducted to 90°, examiner chops down on the arm. If arm suddenly drops to side, this indicates a torn supraspinatus.

Tests for Subacromial Impingement Syndrome
Includes Supraspinatus tendonitis and subacromial bursitis

Painful Arc
See above

Neer’s Test (done passively)
Remember: “Neer - closer to the ear”
Elbow extended, forearm pronated
Examiner stabilizes shoulder, and lifts arm to ear. Pain is a positive test.

Hawkin’s Test
Shoulder flexed forward 90°, elbow flexed 90°, forearm parallel to floor
Examiner then passively rotates the forearm clockwise (causing internal rotation at the shoulder). Pain at the tip of the shoulder is a positive test.

Empty Can Test
Position the arm as though emptying a can: arm abducted 45°, flexed forward 45°, thumb pointing down. Patient resists examiners downward pressure on the arm. Pain at the tip of the shoulder is a positive test.
**Bicipital Tendinitis**

**Speed’s Test**

Elbow extended, arm supinated and forward at 45 degrees. Patient then resists downward pressure from the examiner. Pain at the biceps tendon indicates bicipital tendinitis.

**Yergason’s Test** (resisted supination)

With patient’s arm at side, elbow flexed at 90°, and hand in neutral position. Hold the patient’s wrist and attempt to pronate the forearm. Patient resists by trying to supinate. Pain at the biceps tendon indicates bicipital tendinitis.

**AC Joint Pathology**

**Scarf Test (AC Joint Compression Test)**

Patient places hand on the opposite shoulder. Examiner then pushes arm into the body while stabilizing the opposite shoulder. Pain around the acromioclavicular joint suggests acromioclavicular pathology.

**AC Joint Distraction Test**

Have the patient adduct the arm behind the back. Examiner then applies additional adduction force while stabilizing at the opposite shoulder. Pain at the acromioclavicular joint suggests acromioclavicular pathology.

**Shoulder Instability**

**Sulcus Sign**

With the opposite shoulder stabilized, apply downward pressure on the arm by grasping just above the elbow. Appearance of a sulcus at the tip of shoulder indicates inferior instability.

**Anterior and posterior instability**

Attempt to move the head of the humerus backwards and forwards

Excessive movement indicates anterior (movement forwards) or posterior (movement backwards) instability

**Apprehension Test**

With the patient lying supine, passively abduct and externally rotate the arm at 90°. With one hand holding the wrist, apply upwards pressure against the head of the humerus in an anterior direction to pull the humeral head forward. If the patient becomes apprehensive and complains of pain, this is indicative of recurrent anterior subluxation.

**Relocation Test**

Continuing from the Apprehension Test, apply downward pressure on the head of humerus. If the patient becomes relaxed and looks relieved, this is a positive relocation test for recurrent anterior subluxation.

**Anterior Release Sign**

Continuing from the Relocation Test, suddenly remove the posterior force. If the patient again looks apprehensive and complains of pain, this is a positive anterior release sign for recurrent anterior subluxation.