

Orthopedic Shoulder Examinations

Course 452

Objectives:

By the end of the teaching session, Students should be able to identify normality and abnormality by of the shoulder joint by performing a proper physical examination of shoulder joints in order to identify and characterize the following:

a) **Look:**

- a. Expose both shoulder and upper limbs properly.
- b. Inspect front, side and back.
- c. Look for Limb/joints position, alignment (deformity), swelling, or skin changes
- d. Muscle contour/wasting: Deltoid, Supra- Infra-spinatus muscles

b) **Feel:**

- a. Boney prominences and soft tissues for swelling or tenderness.
- b. Temperature.

c) **Move:**

- a. Start with active ROM :
 - i. Forward Flexion. The motion involved in reaching forward and up to a cupboard above the head. This is measured from zero (lowest) to 180 degrees.
 - ii. Abduction: 0 degree beside body and 180 at maximum Abduction
 - iii. External rotation: Ask the patient to keep the upper arms flat against his/her sides and rotate the forearms outward. The range is from zero (straight ahead) to 80-90 degrees.
 - iv. Internal Rotation: Ask the patient to rotate his arm across his back and walk the fingers as far up the back as possible, recording this by vertebral level. (inferior tip if scapula is =T7, Iliac crest=T5)
- b. Note if painful/painless.
- c. Attempt passive ROM if active ROM is limited or painful.

d) **Do special tests:**

- a. Rotator cuff integrity and strength:
 - Supraspinatus: (empty can test/Jobe test) : Resisted abduction with the arm in 90 abduction, 30 of forward elevation in the plane of the scapula and maximally internally rotated. A positive test occurs when there is pain with weakness.
 - Subscapularis: lift-off test
 - Infraspinatus+Teres minor: resisted external rotation with arm against body side
- b. Stability
 - Apprehension test: can be done in any position

c. Impingement syndrome:

- Neer's impingement sign: pain with FF with humerus in Internal rotation position
- Hawkins's test: With the arm in the throwing position (90 degree of FF) and flexed forward about 30 degrees, forcibly internally rotate the humerus. Pain suggests impingement of the supraspinatus tendon against the coraco-acromial ligament.

e) **NeuroVascular assessment:**