

## SHOULDER COMPLEX

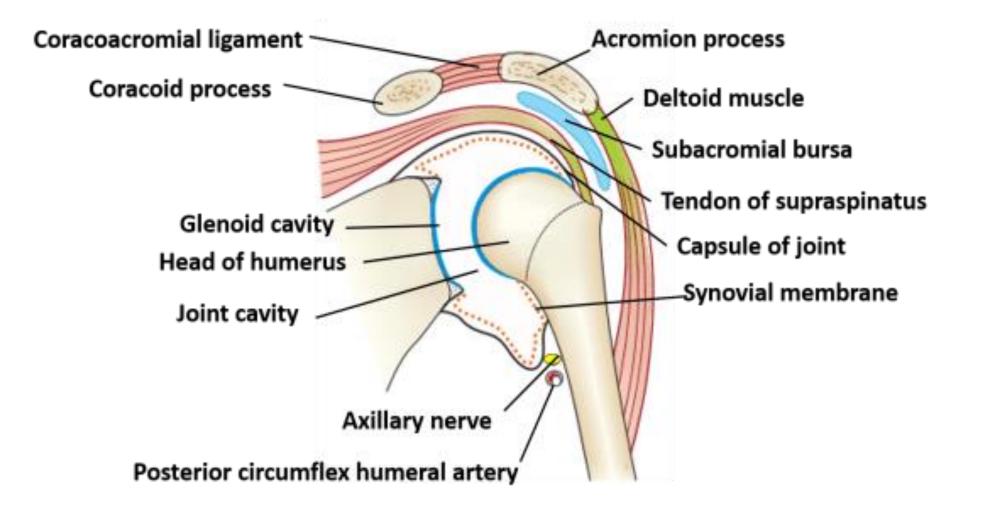


STERNOCLAVICULAR JOINT ACROMIOCLAVICULAR JOINT GLENOHUMERAL JOINT



- Articulation:
- the sternal end of the clavicle, the manubrium sterni, and the first costal cartilage .
- Type:
- Synovial double-plane joint
- Capsule: This surrounds the joint and is attached to the margins of the articular surfaces.

## Shoulder Joint





• This lines the capsule and is attached to the margins of the cartilage covering the articular surfaces



- Sternoclavicular ligament
- Costoclavicular ligament
- Interclavicular ligament

## Blood and nerve supply

• Blood supply:

COLLE

SNS

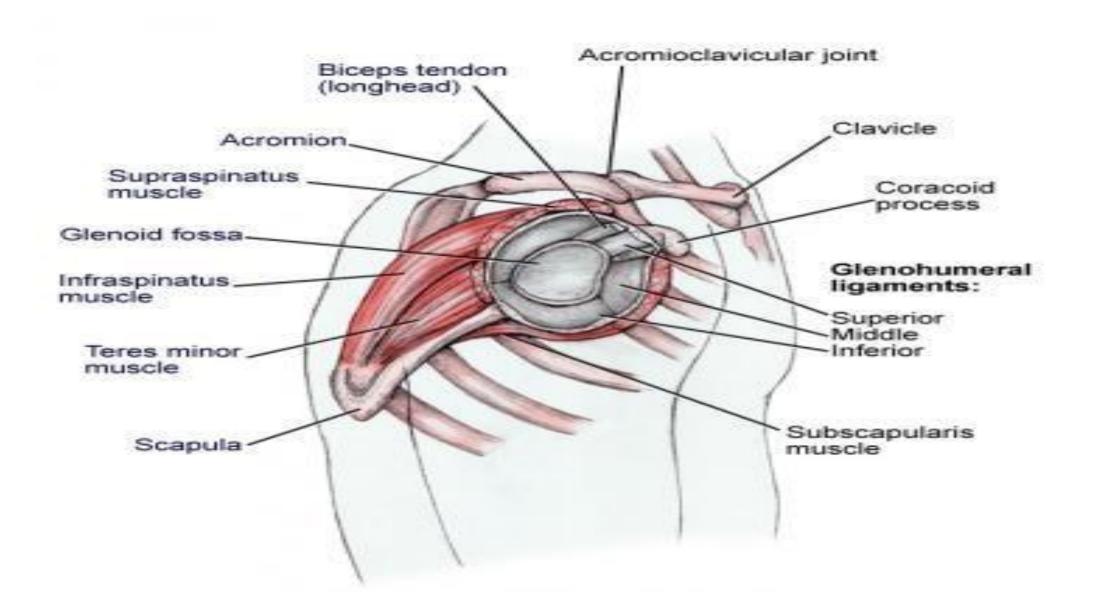
INTHERAP

- Internal thoracic artery
- Suprascapular artery
- Nerve supply:
- Supraclavicular nerve
- Nerve to subclavius muscle



## movements

- Forward movement:
- Serratus anterior muscle
- Backward movement:
- Trapezius and rhomboid muscle





- Elevation:
- trapezius,
- sternocleidomastoid
- levator scapulae
- rhomboid muscles



- Depression:
- Pectoralis minor
- Subclavius muscle



- Articulation:
- Acromion of scapula
- Lateral end of clavicle
- Plane synovial joint



- Superior and inferior acromioclavicular ligaments
- Coracoclavicular ligament



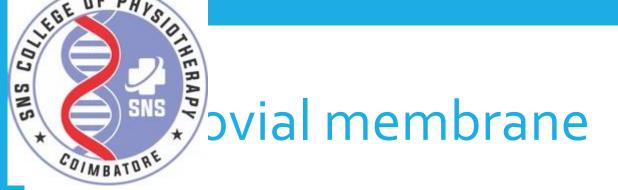
- Anteriorly:
- Deltoid muscle
- Posteriorly:
- Trapezius muscle



- rounded head of the humerus
- the shallow, pear-shaped glenoid cavity of the scapula.
- Synovial joint
- Ball and socket variety



- This surrounds the joint and is attached medially to the margin of the glenoid cavity outside the labrum
- laterally it is attached to the anatomic neck of the humerus.
- The capsule is thin and lax, allowing a wide range of movement.
- It is strengthened by fibrous slips from the tendons of the subscapularis, supraspinatus, infraspinatus, and teres minor muscles (the rotator cuff muscle)



- This lines the capsule and is attached to the margins of the cartilage covering the articular surfaces .
- It forms a tubular sheath around the tendon of the long head of the biceps brachii.
- It extends through the anterior wall of the capsule to form the subscapularis bursa beneath the subscapularis muscle.



- The glenohumeral ligaments are three weak bands of fibrous tissue that strengthen the front of the capsule.
- The transverse humeral ligament strengthens the capsule and bridges the gap between the two tuberosities.
- The coracohumeral ligament strengthens the capsule above and stretches from the root of the coracoid process to the greater tuberosity of the humerus
- Coracoacromial ligament



- Axillary nerve
- Suprascapular nerve



- Flexion:
- the anterior fibers of the deltoid, pectoralis major (clavicular head), biceps, and coracobrachialis muscles.
- Extension:
- the posterior fibers of the deltoid, latissimus dorsi, and teres major muscles



- Abduction:
- supraspinatus to 18<sup>0</sup>
- deltoid to 90<sup>0</sup> •
- Adduction:
- the pectoralis major,
- latissimus dorsi,
- teres major, and
- teres minor muscles.



- Lateral rotation:
- the infraspinatus, the teres minor, and the posterior fibers of the deltoid muscle.
- Medial rotation:
- the subscapularis, the latissimus dorsi, the teres major, and the anterior fibers of the deltoid muscle.



- Anteriorly: The subscapularis muscle and the axillary vessels and brachial plexus. •
- Posteriorly: The infraspinatus and teres minor muscles.
- Superiorly: The supraspinatus muscle, subacromial bursa, coracoacromial ligament, and deltoid muscle.



- INFERIORLY: The long head of the triceps muscle, the axillary nerve, and the posterior circumflex humeral vessels. •
- The tendon of the long head of the biceps muscle passes through the joint and emerges beneath the transverse ligament.

