MOVEMENTS OF THE PECTORAL

(SHOULDER) GIRDLE

Clavicular movements

at the sternoclavicular

And

acromioclavicular

These joints are inevitably associated with movements of the scapula, and these are usually accompanied by movements of the humerus

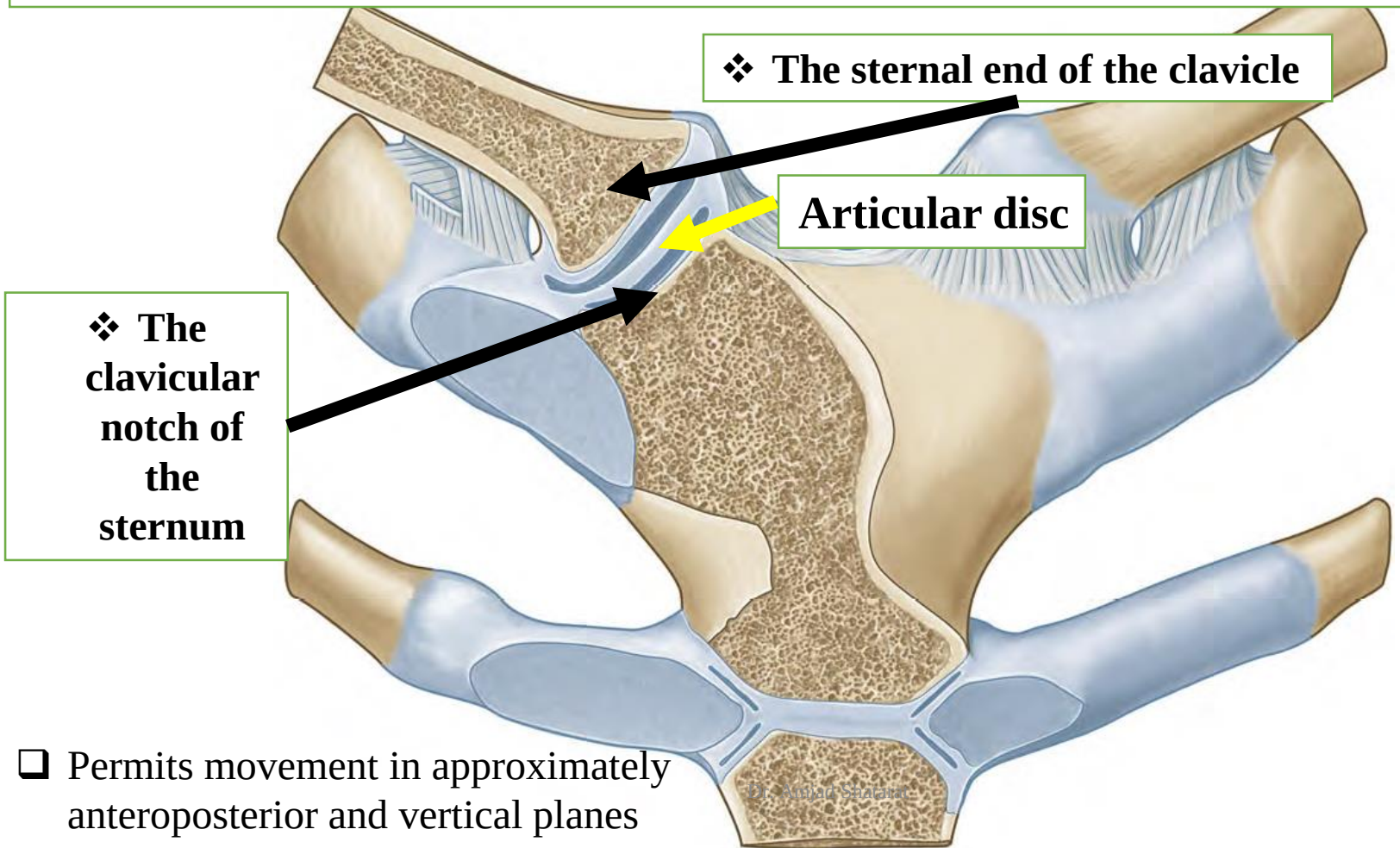
STERNOCLAVICULAR JOINT

- It is a synovial joint
- represents the only skeletal articulation between the upper limb and the axial skeleton.

Articulating surfaces are:

- The sternal end of the clavicle
- The clavicular notch of the sternum

An articular disc completely divides the joint.

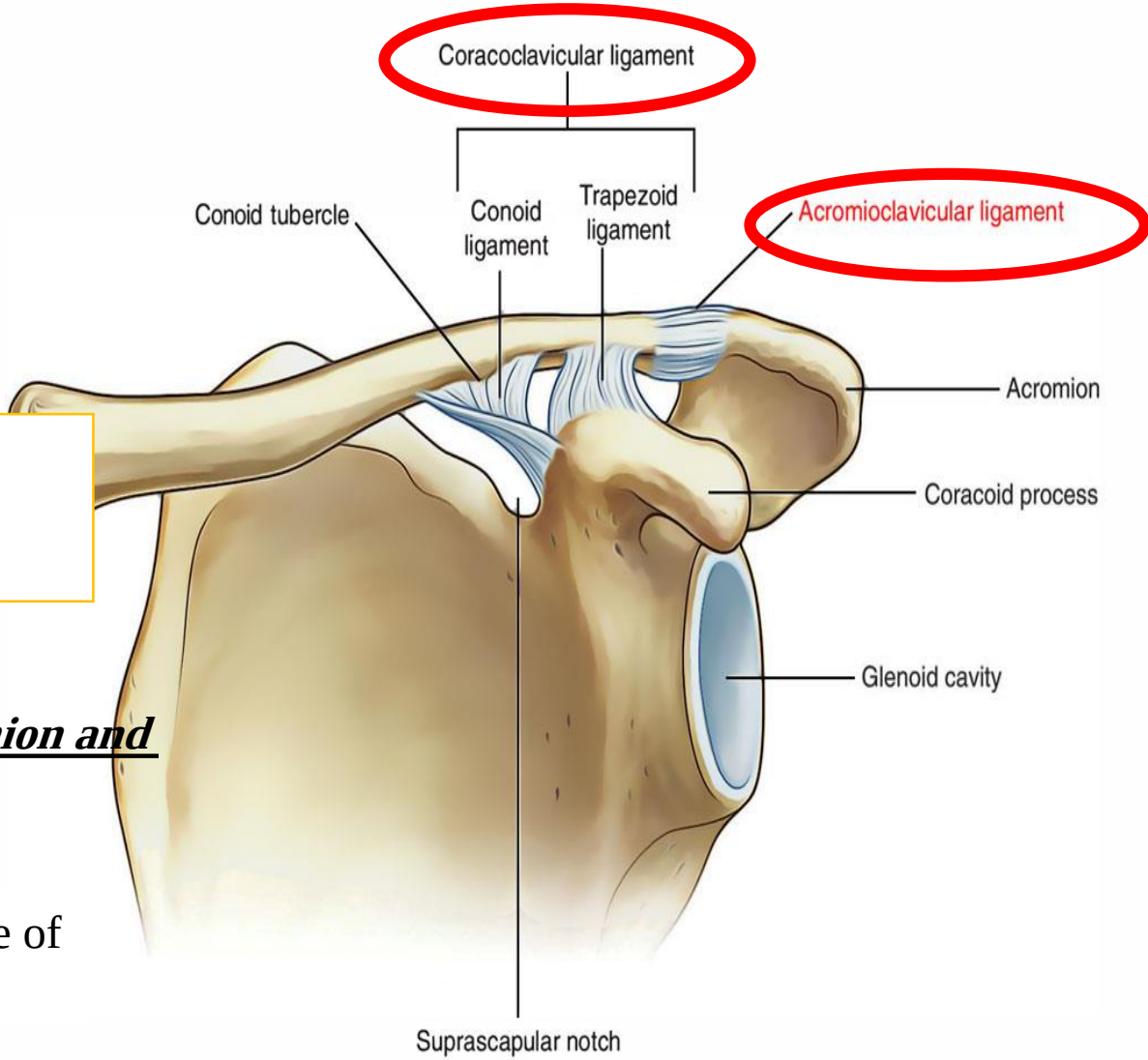


- Permits movement in approximately anteroposterior and vertical planes

ACROMIOCLAVICULAR JOINT

- It is a synovial plane joint.
- ***Articulating surfaces***

❖ The acromial end of the clavicle
❖ The medial acromial margin



Ligaments Read only

A-The acromio-clavicular ligament
B- The coraco-clavicular ligaments

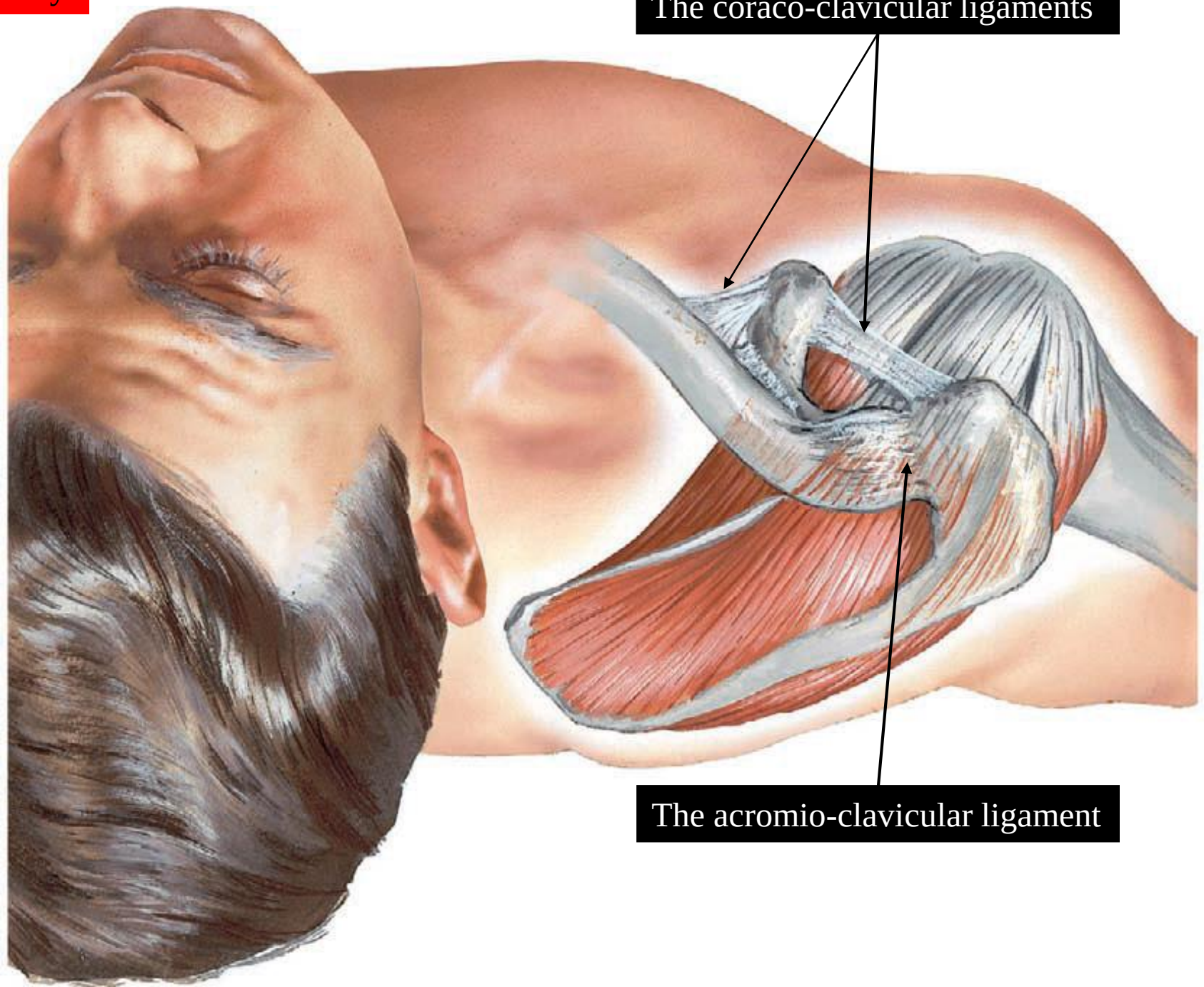
❖ As their name indicates they run between **the clavicle *and the acromion and coracoid processes*** respectively

Movements at the joint are like those of the sternoclavicularjoint.

Note Read only

The coraco-acromial ligament is made out of two ligaments, you are not required to know their names.

Read only


The coraco-clavicular ligaments
The acromio-clavicular ligament

scapular movements

Elevation and depression

Usually gravity alone is sufficient: when necessary, the lowest part of serratus anterior and pectoralis minor are active depressors.

It is produced by the upper part of trapezius and levator scapulae

Protraction: anterior movement

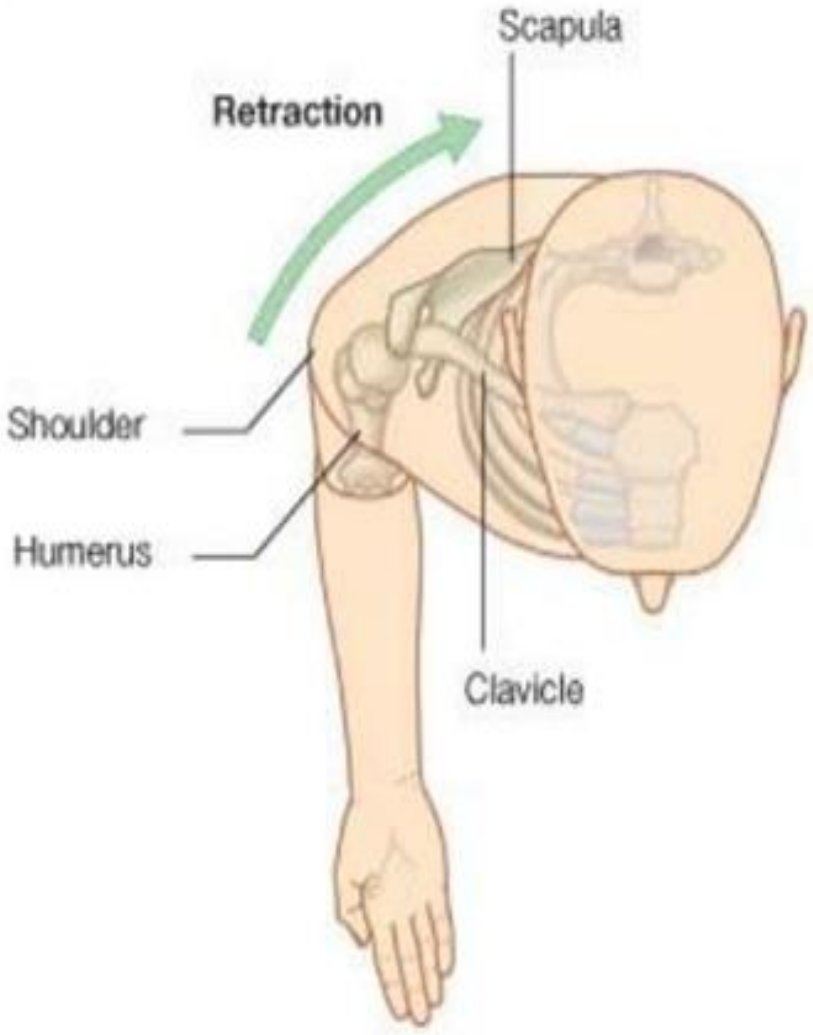
protraction
(forward movement of the scapula)

occurs in
pushing, thrusting and reaching movements, usually

Muscles involved

Serratus anterior and pectoralis minor are prime movers

Retraction: posterior movement



Retraction
(backward movement of the scapula)

bracing back the shoulders

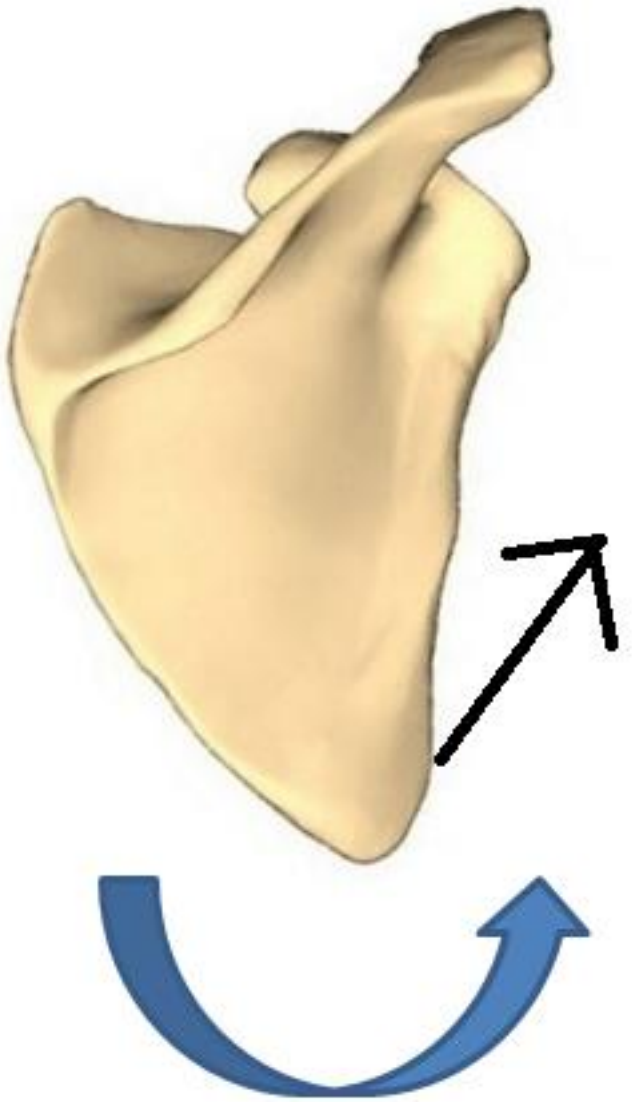
Muscles involved

Trapezius and the rhomboids are prime movers

Lateral rotation

Lateral (upward) rotation of the scapula increases the range of humeral elevation by turning the glenoid cavity to face almost directly up, e.g.

raising an arm above the head



Muscles involved

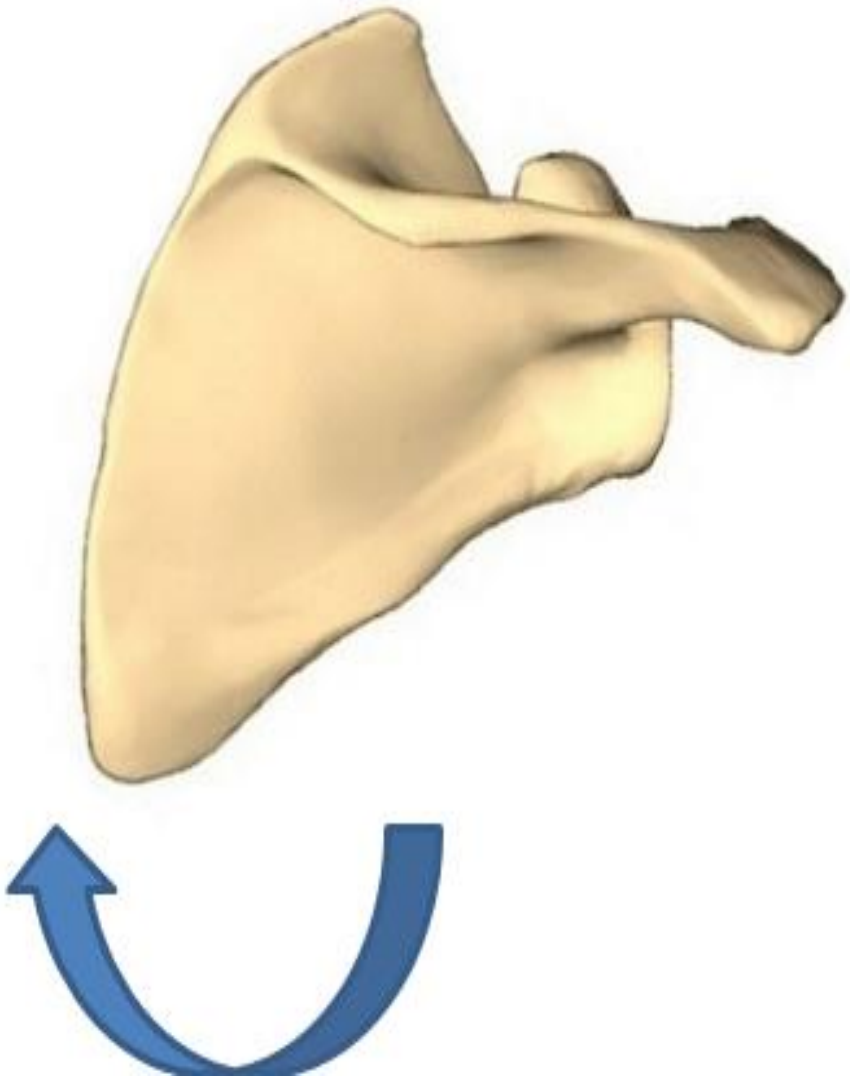
Trapezius (upper part) and serratus anterior (lower part) are prime movers.

Medial (downward) rotation

medial rotation of the scapula is achieved by turning the glenoid cavity to face down

Muscles involved

is usually effected by gravity: gradual active lengthening of trapezius and serratus anterior is sufficient to control it.



Read only

scapulohumeral rhythm

- Mobility of the scapula is essential for the freedom of movement of the upper limb. When testing *the range of motion of the pectoral girdle,* both scapulothoracic (movement of the scapula on the thoracic wall) and glenohumeral movements must be considered.

- Although the initial 30 degrees may occur without scapular motion, in the overall movement of fully elevating the arm, the movement occurs in a 2:1 ratio.

For every 3 degrees of elevation, approximately 2 degrees occurs at the glenohumeral joint and 1 degree at the scapulothoracic joint.

This is known as *scapulohumeral rhythm*