

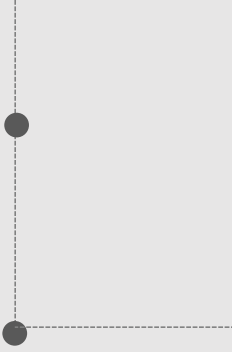


Muscle Training in the Acute Phase of I、II Subacromial Impingement Syndrome

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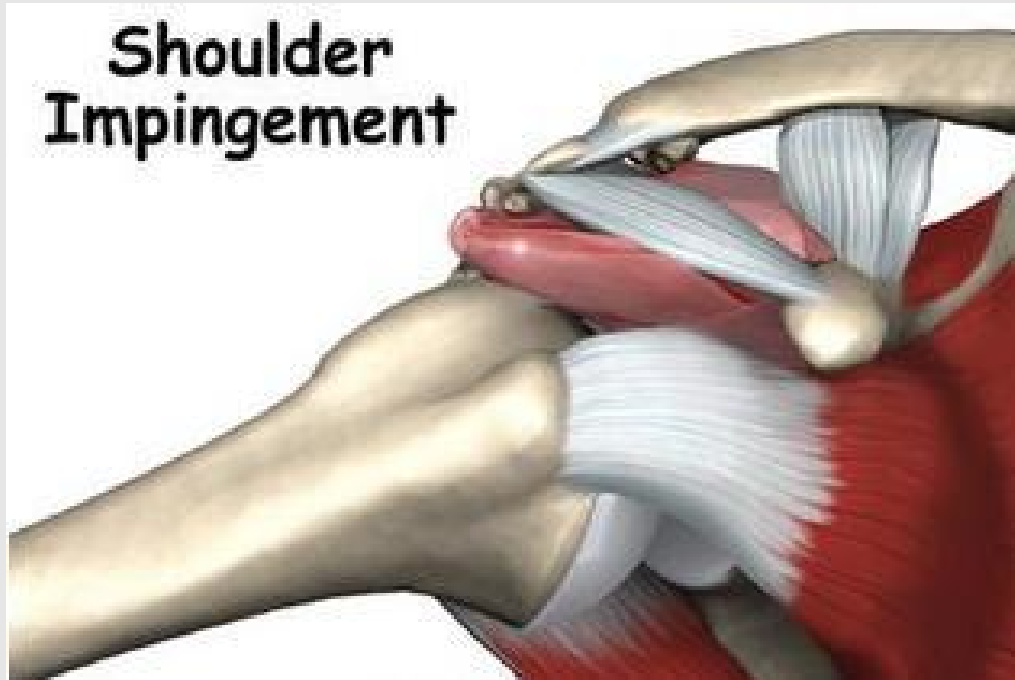
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Brief

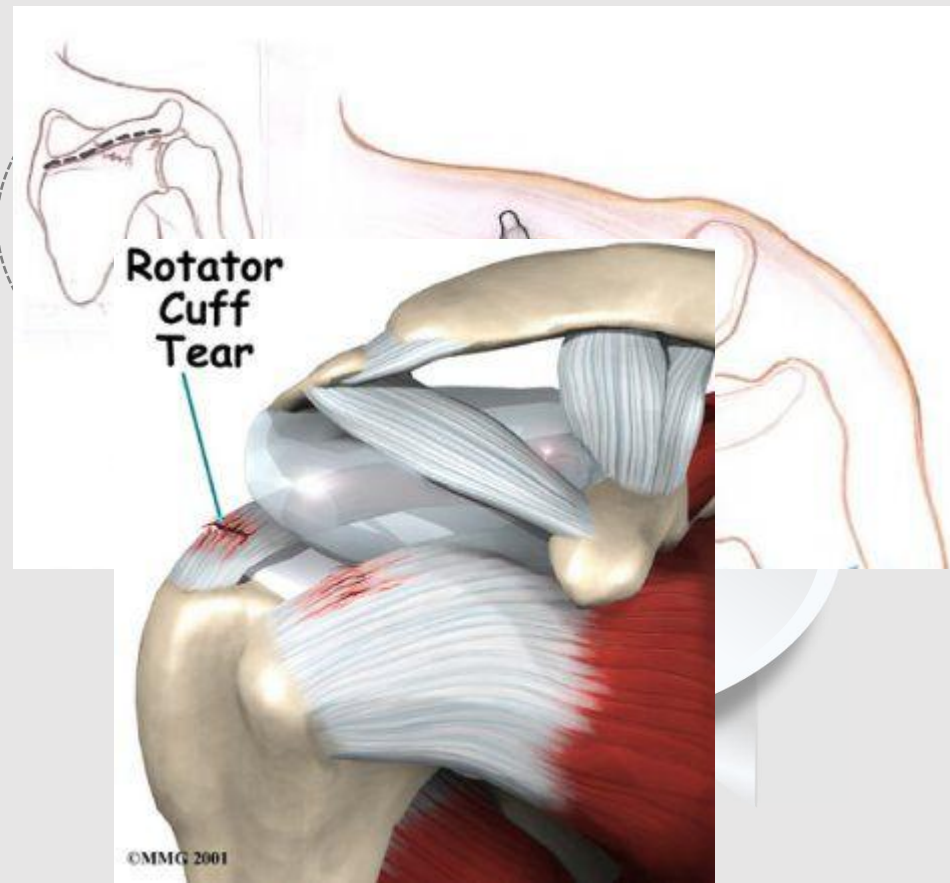
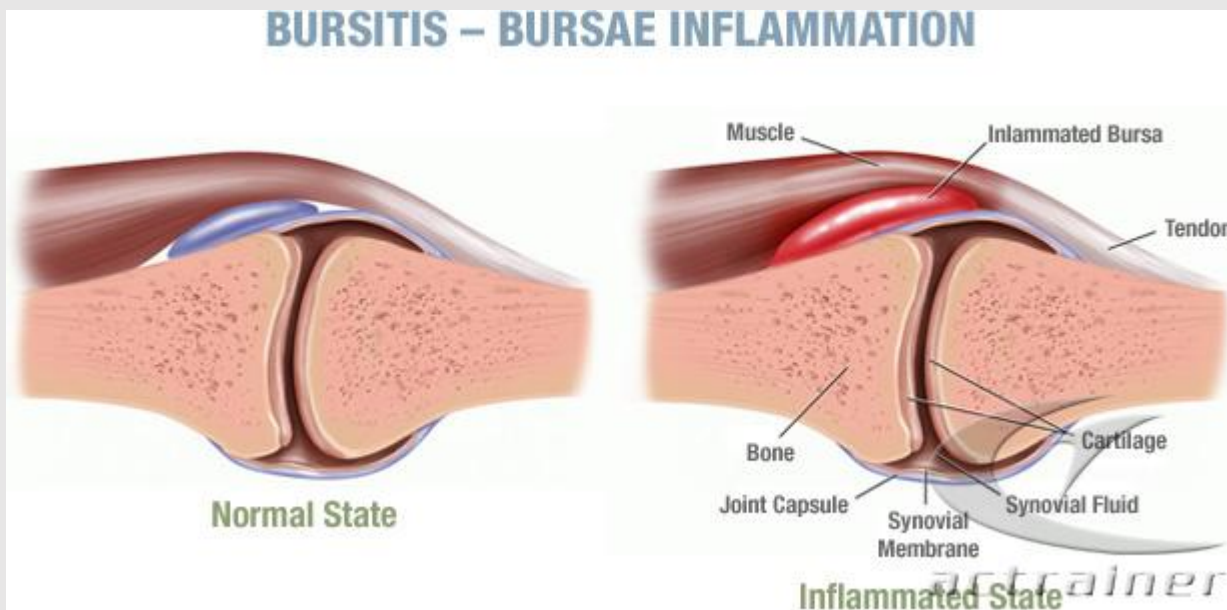
t SAIS

Typical syndromes



painful feeling as the shoulder abduces
or elevates to a certain degree or position

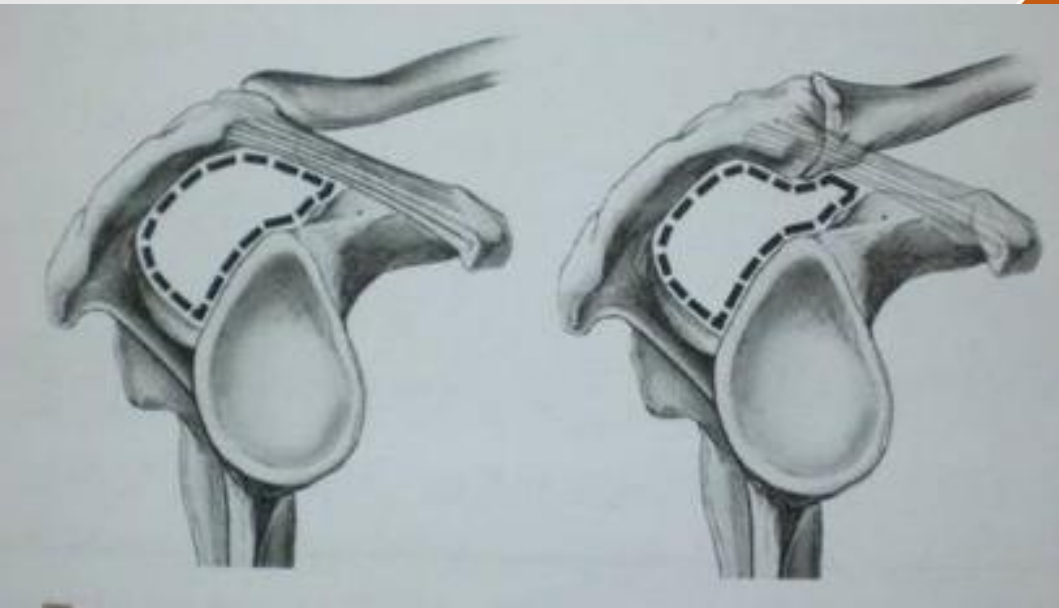
SAIS



3

Rotator cuff is impaired

Repetitive elevation
at the shoulder

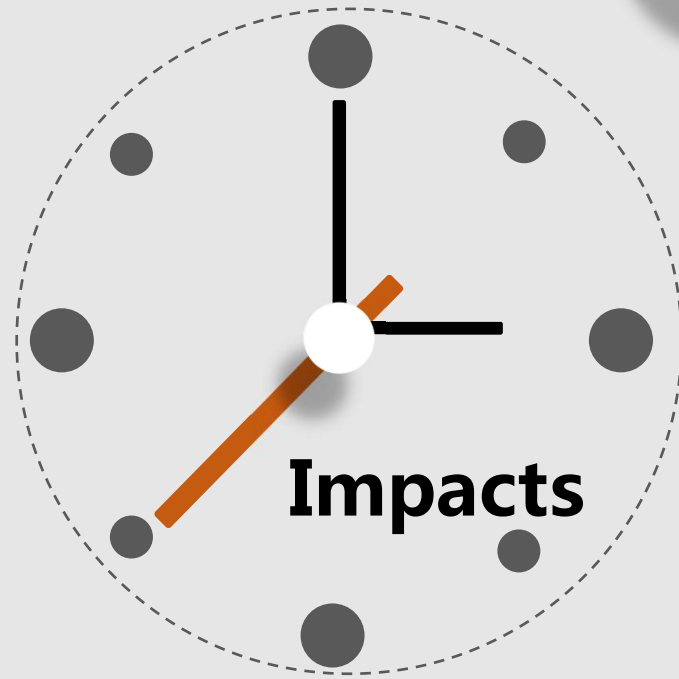


Hemorrhage,
edema and the
congestion and
inflammation of
bursa

Reasons



the change of the shoulder structure



1

painful

2

project into your arm

3

worsen at night

4

constrain the range of
your movements at the advanced
stage

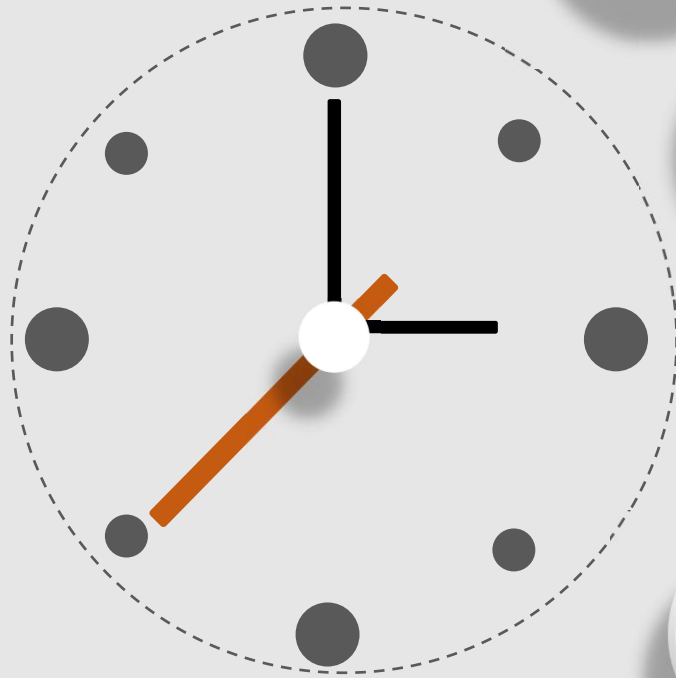


Techniques to Maintain Integrity and Function for Humeral Head Control

Multiple-Angle
Isometrics

The biceps
brachii
Supraspinatus
Infraspinatus
Teres minor
subscapularis

Self-Applied
Multiple-Angle
Isometrics



1

Patient position: supine sitting standing

2

Gentle resistance and pain-free posture

3

Apply resistance to the distal forearm

4

Talk with the patient

5

Apply resistance slowly

•External rotation

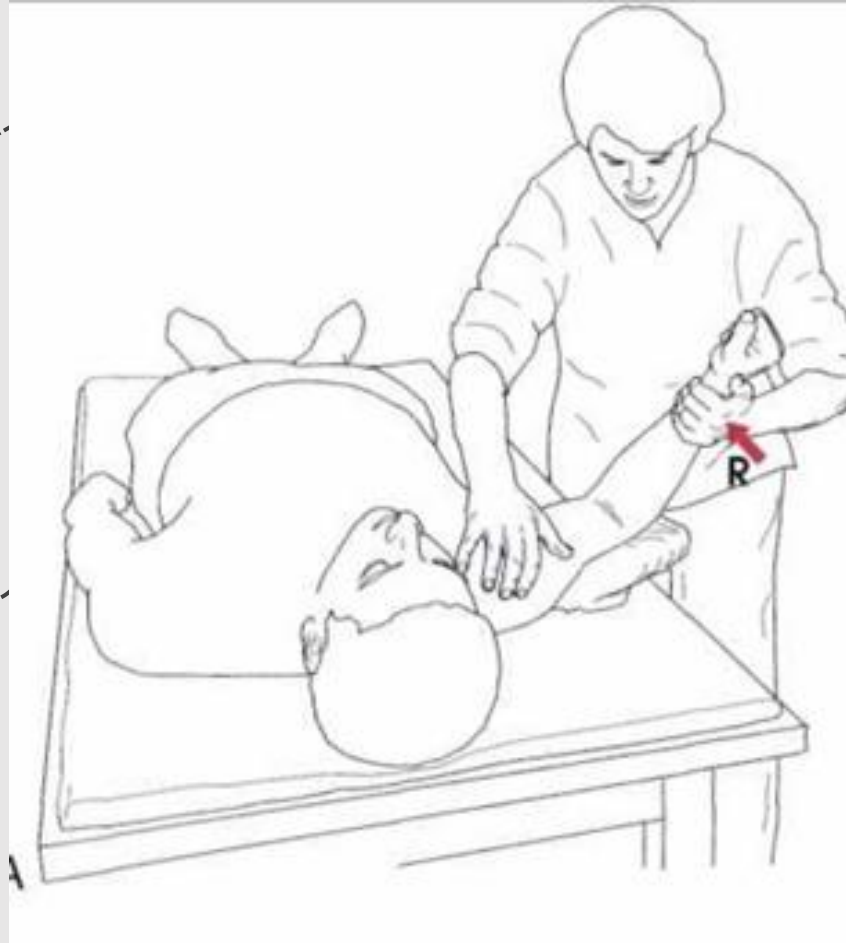
Apply resistance against the dorsal surface of the forearm.

1

Position the humerus at the patient's side.

2

The elbow flexes 90° .



3

Infraspinatus,
Teres minor,
Posterior
deltoid

• Abduction

Deltoid, supraspinatus, the long head of biceps brachii.

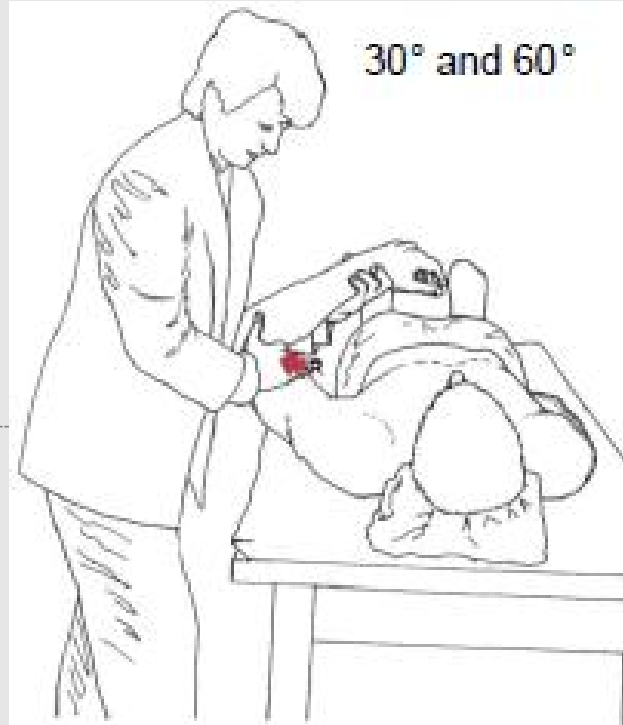


Maintain the humerus neutral to rotation.

Resist abduction at 0° , 30° , 45° , and 60° .

•Scapular plane elevation

1



2

Position the shoulder between 30° and 60° of elevation.

Controlled manual resistance is applied to humerus.

•Elbow flexion with forearm supination.

The long head of biceps brachii.

1

Position the humerus at the side and neutral to rotation.

2

Apply resistance to forearm flexion.



3

Change the position of the shoulder.

4

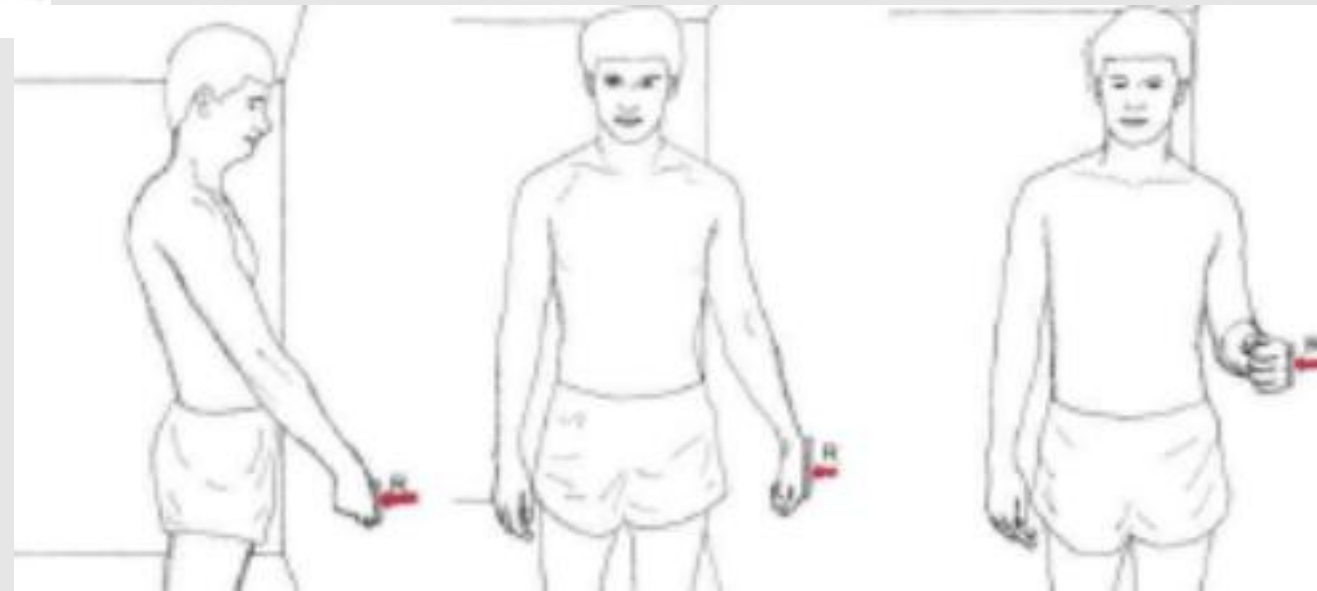
Repeat the isometric resistance to elbow flexion.

Self-Applied Multiple-Angle Isometrics



Using the opposite hand

Using a stationary object





Maintain Integrity and Stabilizing
Function For Scapular Control

NOTE



Isometric exercises



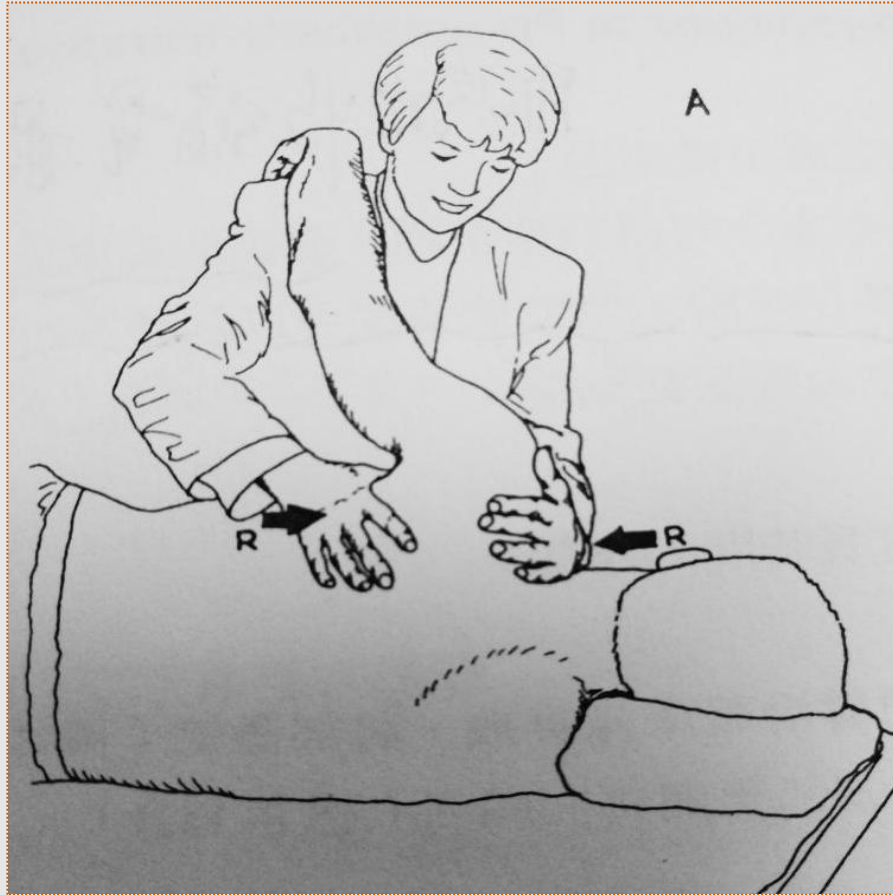
Begin with the right position.



At an proper intensity.

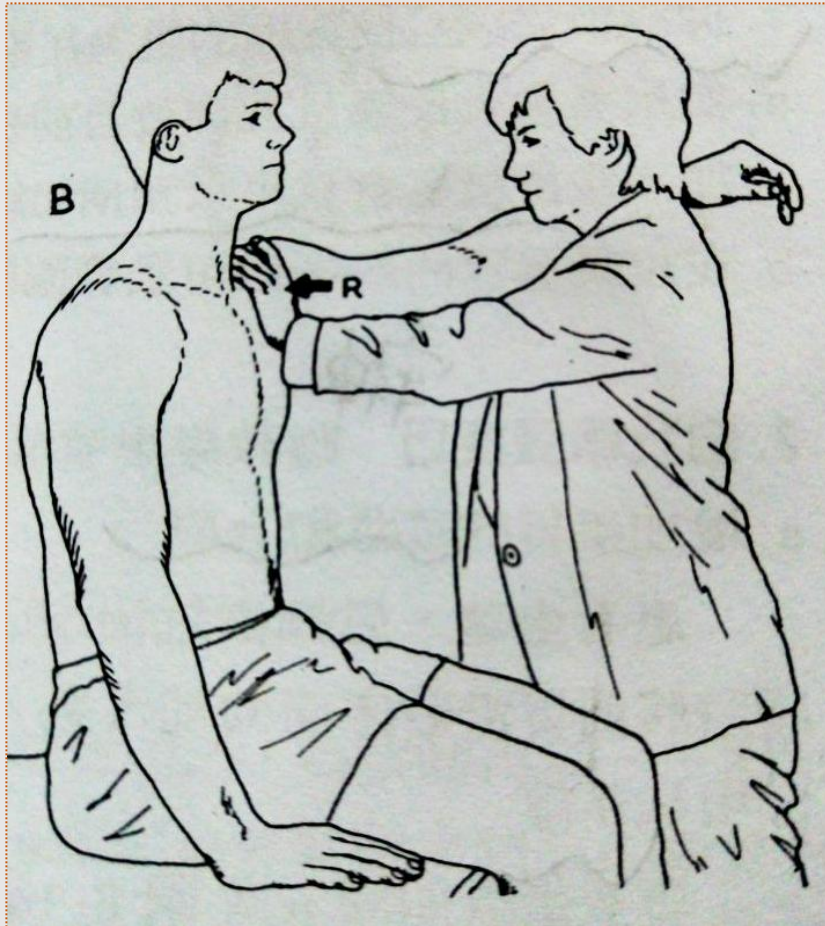


Elevation/Depression



- Place top hand superiorly to resist **elevation**; the other hand against the inferior angle to resist **depression**;
- Activation of the upper trapezius and levator scapulae muscle (elevation) and the lower trapezius (depression).

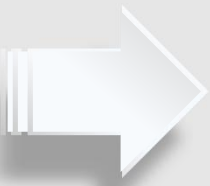
Protraction/Retraction



- resist against the coracoid and acromion process; other hand is placed against the medial border.
- Activation of the **serratus anterior** (protraction) and **rhomboids** and **trapezius** (retraction) .



Upward and downward rotation



- Place one hand around the inferior angle and the other hand around the acromion and coracoid process to provide resistance.

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3. Labriola JE, Lee TQ, Debski RE, et al. Stability and instability of the glenohumeral joint: The role of shoulder muscles[J]. J Shoulder Elbow Surg, 2005, 14(1 Suppl 1):S32-S38.
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**THANK
YOU !!!**

