

# SHOULDER REGION SPECIAL TEST



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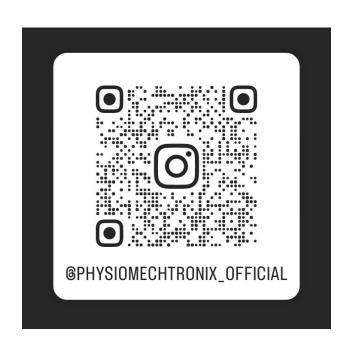
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#### Why US?

- Trust
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### Objective

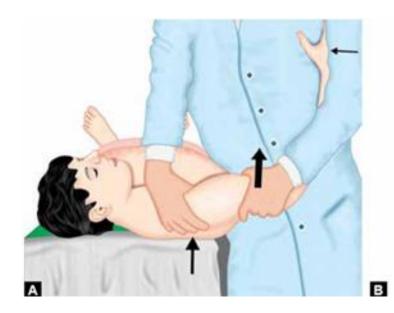
To enable the students to acquire knowledge on special test – Shoulder region and able to recall the contents and demonstrate skill fully.



#### Anterior Drawer Test Of The Shoulder

- Step1. Patient in supine position.
- Step2. Relax the affected shoulder by holding patients arm (or placing hand on axilla) with therapist one hand.
- **Step3.** Abduct the patient shoulder between the 80 and 120 degree, Forward flexed up to 20 degree, laterally rotated up to 30 degree.
- Step4. Stabilize the patient scapula with the therapist opposite hand by pushing the spine of the scapula with index and middle finer. Applying counterpressure on patients coracoid process with the therapist thump.
- Step5. Draws the humerus forward (anteriorly) using the hand that is holding patients arm (or placing hand on axilla).
- Step6. Positive test indicates the anterior instability decided by the amount of anterior translation which is accessible comparing with the normal side







Grade	Diagnosis
grade 0	Minimal displacement
grade 1	Humeral head reaches glenoid rim
grade 2	Humeral head can be dislocated but spontaneously resolved
grade 3	Humeral head does not spontaneously reduce

https://youtu.be/G8s 7Q5zfTM

### Wright Test - for Thoracic Outlet Syndrome

The test is performed in 2 steps:

#### First step:

- head forward, while the arm is passively brought into abduction and external rotation to 90 without tilting the head.
- The elbow is flexed no more than 45. The arm is then held for 1 min
- the tester measure radial pulse and monitor patient symptoms onset

#### **Second step:**

- The tester monitors the patient's symptom onset and the quality of the radial pulse.
- The test is repeated with extremity in hyperabduction (end range of abduction).

#### **Positive Test**

- A decrease in the radial pulse and/or reproduction of the patient's symptoms
- The pulse disappearance indicates a positive test result for thoracic outlet syndrome

https://youtu.be/L6BoVyE\_vfE





### Shoulder Apprehension Test - Glenohumeral instability

The patient should be position in supine.

The therapist will flex the patient's elbow to 90 degrees and abducts the patient's shoulder to 90 degrees in sagittal plane and 180 degrees in frontal plane (horizontal abduction), maintaining neutral rotation.

The examiner then slowly applies an external rotation force to the arm to 90 degrees while carefully monitoring the patient. Patient apprehension from this maneuver, not pain, is considered a positive test.



Pain with the maneuver, but not apprehension may indicate a pathology other than instability, such as posterior impingement of the rotator cuff.

https://youtu.be/\_JA-qvXcUdQ



Apprehension test. The patient is supine and the examiner applies a downward force on the wrist while stabilizing the elbow to evaluate for anterior shoulder laxity.



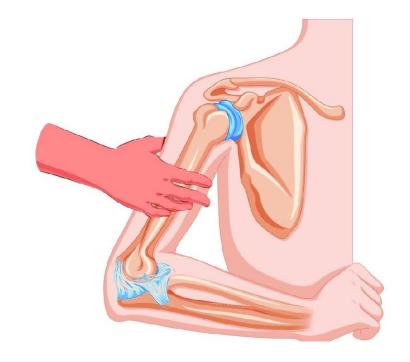
### Arm Squeeze Test - cervical nerve root compression from shoulder disease

- The examiner stands behind the patient
- Squeezes the middle third of the patient's upper arm with the thumb (examiner) on the patient's triceps while the rest of the fingers is on the patient's bicep with a moderate compression



The test is positive if the patient reports 3 or higher on VAS with pressure on the middle third of the upper arm compared with the acromioclavicular joint and subacromial area.

https://youtu.be/JS-dphAKL8Y





The anatomic reasoning behind this test is that because the musculocutaneous nerve (cervical root from C5 to C7), the radial nerve (from C5 to T1), the ulnar nerve (from C7 to T1), and the median nerve (from C5 to T1) are relatively superficial in the middle third of the arm and easy to elicit a painful provocation response by squeezing the arm.

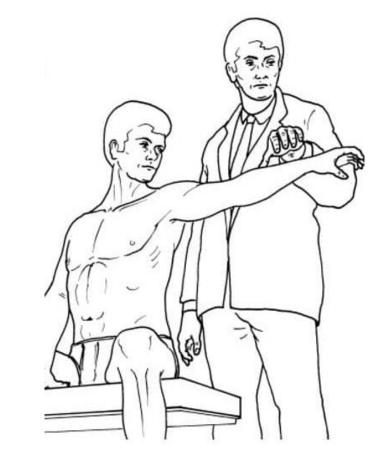
A moderate compression of skin, subcutis, and muscle by squeezing the middle third of the upper arm (brachial biceps and triceps area) on the side with shoulder pain elicits an intense reaction of local pain only in patients with cervical nerve root compression from C5 to T1, not when the pain arises from the shoulder



#### Codman's Test - rotator cuff tear

• The therapist passively raises the patient's arm to 90 degrees of abduction. The patient then lowers the arm back to neutral with the palm down. If the patient's arm drops suddenly or experiences pain, then the test is considered positive.

https://www.youtube.com/watch?v=xNk AGw0BzXA



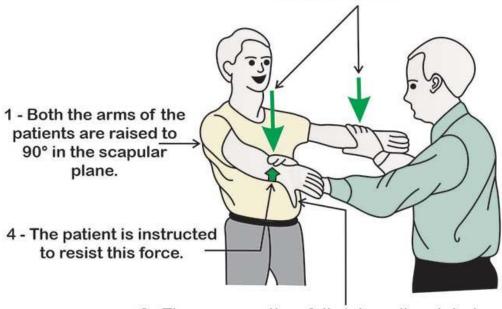


# Empty Can Test - Supraspinatus test

- 1. The patients arm is actively abducted to 90°
- 2. The examiner applies downward resistance to the abducted arm
- 3. With the patient's hand in a fist, and the thumb sticking out, the shoulder is actively <u>internally rotated</u>, and angled forward to 30°, so that their thumb is in a downward facing direction (empty can position), in the scapular plane



3 - The examiner then applies a downward directed force to the arm.



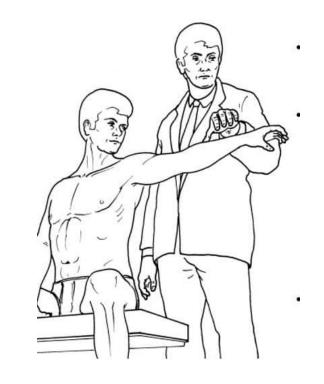
2 - The arms are then fully internally rotated so that the thumbs point towards the floor as if the patient were draining liquid out of a can.

https://youtu.be/mC 5Lmy7iAo



# Full Can Test- Supraspinatus test

The patient can be seated or standing for this test, holding their arm at 90° of elevation in the scapular plane (30° anterior to the frontal plane) with full external rotation of the glenohumeral joint. In this position, the patient's thumb should be pointing up. The therapist should stabilize the shoulder while applying a downward force to the arm whilst the patient tries to resist this motion









#### https://youtu.be/SGEIKmiP09s



# Hornblower's Sign/Patte's Test - teres minor

- 1. The patient is in a standing position
- 2. The patient's arm is passively elevated to 90 degrees in the scapular plane, by the examiner
- 3. The examiner passively flexes the elbow to 90 degrees
- 4. The patient is asked to actively externally rotate the shoulder against the examiner's resistance



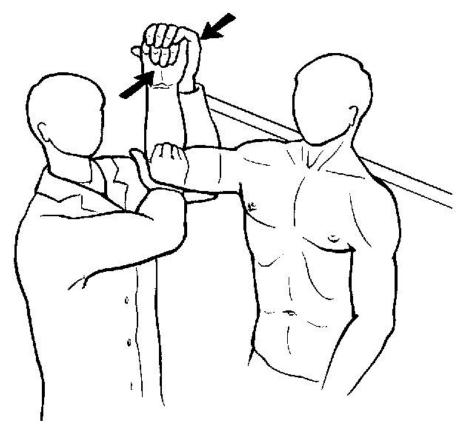




Fig. 1 Fig. 2

#### https://youtu.be/KcNBtbVaatY



#### Inferior Sulcus Test -

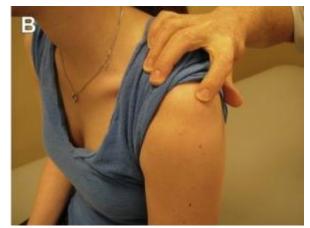
glenohumeral joint for inferior instability, due to laxity of the superior glenohumeral ligament and coracohumeral ligament

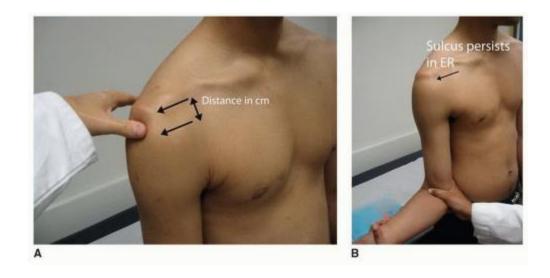
This test can be performed with the patient sitting, standing, or in a supine position with their shoulder in neutral (0 degrees rotation). The examiner then pulls the distal part of the humerus in a caudal direction.

However, the sitting position with arms by the side is considered to provide more reliable results as suggested by McFarland *et al*.

The test is considered positive when the appearance of sulcus in the subacromial space is more than 1cm as the humeral head translates in the inferior direction







To enhance the diagnostic accuracy, the test should be performed twice, first with the arm in neutral rotation and second with the arm in external rotation. Inferior translation should be the same in both positions. An increased degree of inferior translation with the arm in external rotation suggests a potential lesion of the rotator interval.

https://youtu.be/taN04xR4iAs



# Infraspinatus Test

- The patient arms should be at his side not quite touching his trunk, with the elbows flexed to 90 degrees. The examiner places his hand on the dorsum of the patient's hands. The patient is asked to externally rotate both forearms against the examiner's resistance.
- The test is positive when there is weakness or pain in external rotation. Infraspinatus tears are usually painless so external rotation weakness strongly suggests infraspinatus tear



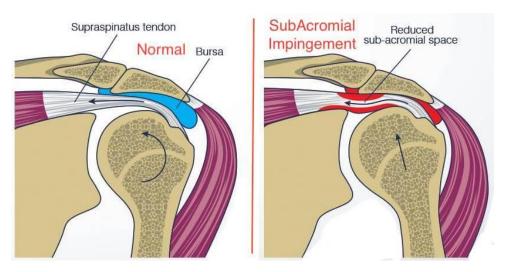


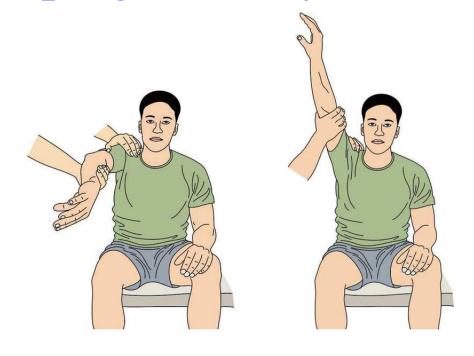
https://youtu.be/gPDN7XIA-KI



### Neer Test - subacromial impingement syndrome

The examiner should stabilize the patient's scapula with one hand, while passively flexing the arm while it is internally rotated. If the patient reports pain in this position, then the result of the test is considered to be positive.





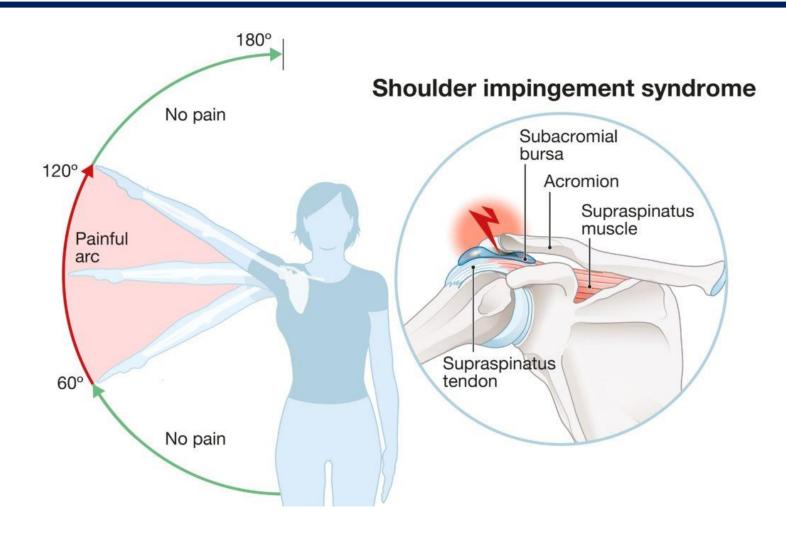
https://youtu.be/k21FNtBjQ14



### Painful Arc - subacromial impingement syndrome

- With the patient in either sitting or standing the patient should be instructed to abduct the arm in the scapular plane.
- While abducting the arm, if the patient experiences any pain in and around the glenohumeral joint the patient must tell the physiotherapist what they are experiencing.
- Once there is an onset of pain the physiotherapist will instruct the patient to continue abducting the arm as high as they can. One the patient gets to approximately 120 degrees of abduction there should be a reduction in the amount of pain being experienced.
- Following completion of the abduction movement the patient should then slowly reverse the motion, bring the arm back to neutral position via the movement of adduction.
- This test is considered to be positive if the patient experiences pain between 60 and 120 degrees of abduction which reduces once past 120 degrees of abduction

Rhidging, Tech. and Healing.



https://youtu.be/wU-ppPL0JpQ



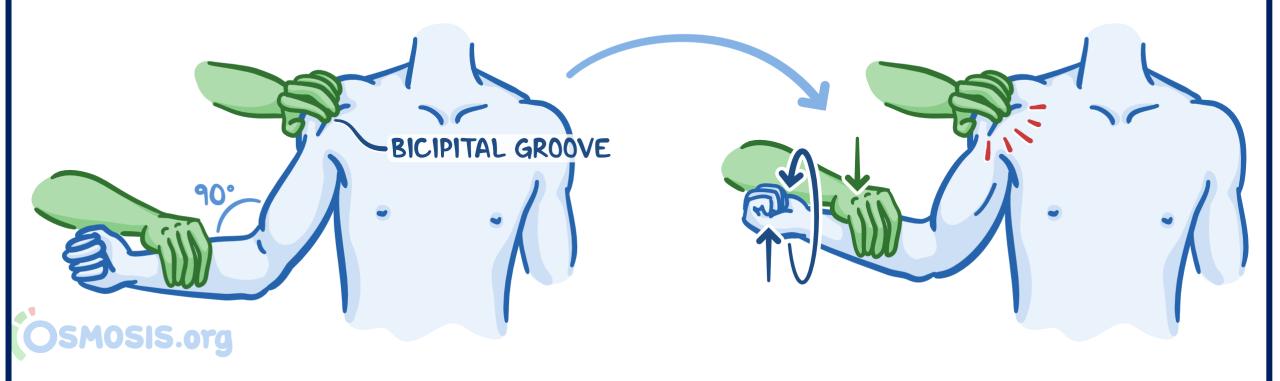


# Yergasons Test - bicipital tendonitis

The patient should be seated or standing in the anatomical position, with the humerus in a neutral position and the elbow in 90 degrees of flexion in a pronated position. The patient is asked to externally rotate and supinate their arm against the manual resistance of the therapist produced by wrapping the hand around the distal forearm (just above the wrist joint).

Yergason's Test is considered positive if the pain is reproduced in the bicipital groove and a biceps or a SLAP lesion is suspected. If a "clicking" sensation familiar to the patient is produced during the test, damage to the transverse humeral ligament (which overlies the intertubercular sulcus) should be suspected too

### YERGASON TEST





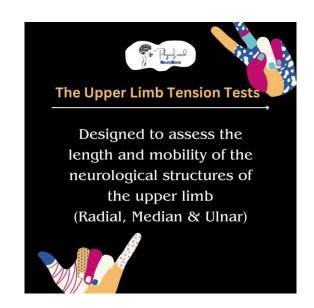
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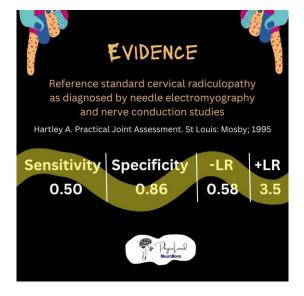


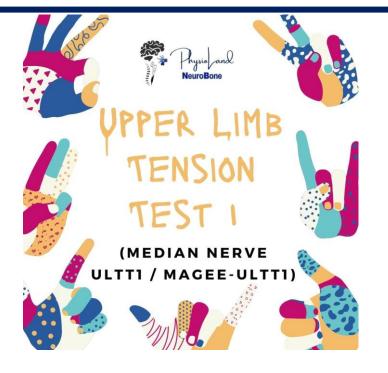


https://www.instagram.com/p/C5diL IdPVXA/?utm source=ig web copy link&igsh=MzRlODBiNWFlZA==









#### **Movements performed**

- 1. Shoulder depression
- 2. Shoulder abduction 110\*
- 3. Shoulder external rotation with elbow at 90\*
- 4. Forearm supination
- 5. Wrist and finger extension
- 6. Elbow extension



### **Upper Limb Tension Test 1 (ULTT1, Median nerve bias, Magee-ULTT1)**

https://www.instagram.com/p/C5gPldiPFPH/?utm\_source=ig\_web\_copy\_link&igsh=MzRIODBiNWFIZA==



#### **Provocation symptoms using**

After attaining ULLT 1 position:

1. Proximal area,

Relieve wrist and finger extension (i.e., bring wrist & fingers to neutral position).

It may *reduce the symptom*.

After attaining ULLT 1 position:

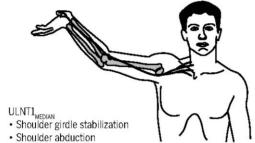
2. Distal symptoms,

Contralateral neck flexion is advised to perform by the patient actively.

it may aggravates the symptoms.

(If pain relieves during neutral or same side flexion position, then it is ULTT1 +ve).

#### (MEDIAN NERVE- ULLT1)



- Wrist/finger extension
- Forearm supination
- · Shoulder external rotation
- · Elbow extension
- · Structural differentiation
- Cervical sidebending
- Release wrist extension



#### ALERT!!!!!!!

- While performing ULTT, there may be a stretch pain in the muscle due to its tightness or shortening length.
- It may lead to a bias while performing neurodynamic length testing.

Hence, structural differentiation method can be used while performing UZTTs

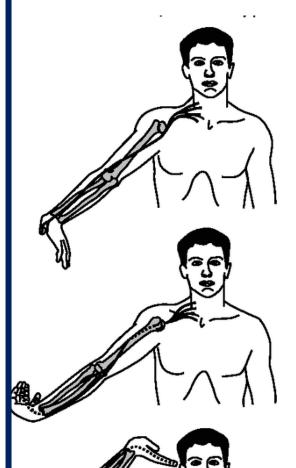


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#### ULNT2<sub>MEDIAN</sub>

- Shoulder girdle depression
- Elbow extension
- Shoulder external rotation and forearm supination
- Wrist/finger extension
- Shoulder abduction
- · Structural differentiation
- Cervical sidebending
- Release shoulder girdle depression
- Release wrist extension

# **Upper Limb Tension Test 2A (ULTT2A, Median nerve bias, Magee-ULTT2)**

#### Indications-

- 1. Radiating pain in the upper limb<sup>[5]</sup>
- 2. Tingling sensations in first 3 fingers

#### ULNT<sub>RADIAL</sub>

- Shoulder girdle depression
- Elbow extension
- Shoulder internal rotation and forearm pronation
- Wrist/finger flexion
- · Shoulder abduction
- · Structural differentiation
- Cervical sidebending
- Release shoulder girdle depression
- Release wrist flexion

### **Upper Limb Tension Test 2B (ULTT2B, Radial nerve bias, Magee-ULTT3)**

#### Indications-

- 1. Radiating pain in the upper limb
- 2. Supinator tunnel syndrome<sup>[5]</sup>
- 3. De Quervain`s disease
- 4. Cervical Radiculopathy

#### ULNT<sub>I I NAR</sub>

- Wrist/finger extension
- Forearm pronation
- Elbow flexion
- Shoulder external rotation
- · Shoulder girdle depression
- · Shoulder abduction
- Structural differentiation
- Cervical sidebending
- Release shoulder girdle depression
- Release wrist extension

### Upper Limb Tension Test 3 (ULTT3, Ulnar nerve bias, Magee-ULTT4)

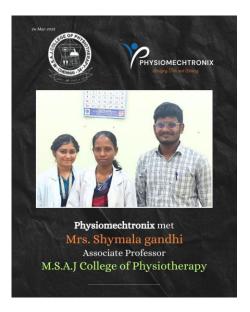
#### Indications

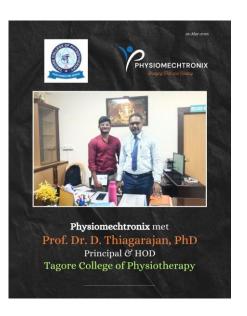
- 1. Pain radiating to 4th and 5th digits<sup>[5]</sup>
- 2. Thoracic outlet syndrome
- 3. Carpal tunnel syndrome



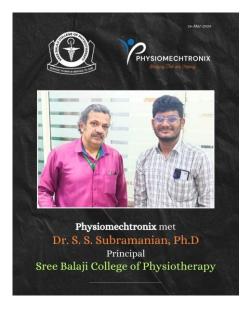
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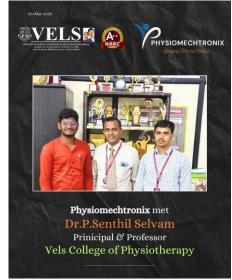
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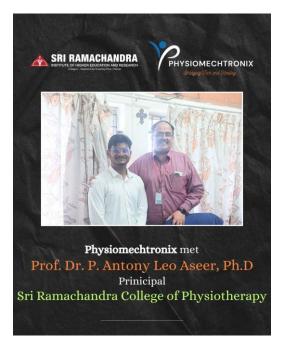


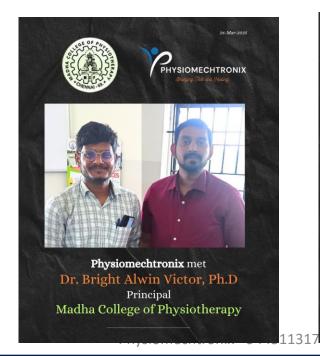


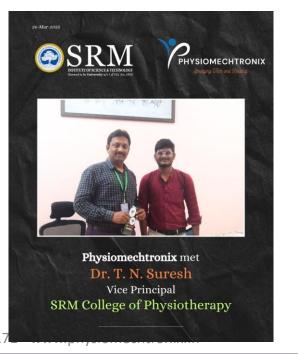














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