### **MUSCLE TESTING**

### LATISSIMUS DORSI

Patient in prone position Adduction of the arm with extension and in medial rotation against resistance



## PECTORALIS MAJOR

## **Upper fibres**

Supine; examiner stabilises opposite shoulder

# Lower fibres

Supine and hand towards the opposite pelvis to Stabilize

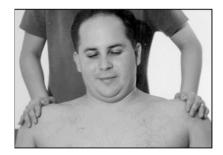
Examiner gives resistance in opposite direction



Also: can be examined as shown in the figure with hands against the pelvis and feel anterior axillary fold

### TRAPEZIUS

Ask the patient to shrug the shoulder with neck in slight extension. Pressure against the shoulder in the direction of depression.



## **RHOMBOIDS AND LEVATOR SCAPULAE**

The arm is placed with the elbow flexed, the humerus adducted and extended in slight lateral rotation. Watch for the muscle prominence along the medial border of the scapula



### **Serratus Anterior**

Patient faces the wall, elbow straight at shoulder level, And now he pushes hard against the wall; watch the winging [prominent medial scapula] Alternative method as shown with axial resistance against flexed elbow.



#### DELTOID

3 portions	
Anterior fibres	Flexes the shoulder
Middle fibres	Abducts the shoulder
Posterior fibres	Extends the shoulder

With elbow flexed to 90°, patient abducts or flexed or extends against examiner's resistance. Examiner with other hand feels contraction in the muscle

# TOS [Thoracic outlet syndrome]

### Adson's test

Compression of the neurovascular structures as they exit the thorax above the first rib.

Adson's test is the most well known test. The arm of the standing patient is abducted 30° at the shoulder and maximally extended.



The examiner now palpate radial artery. The patient is then asked to turn the head toward the side of shoulder to be examined. The patient is then asked to take a deep breath and hold it. Diminution of the pulse in the test position suggests the possibility of TOS.

## **ROOS TEST**

The patient is asked to abduct the affected shoulder 90° while flexing the elbow 90° as well.

The patient is then asked to open and close the hand 15 times.

The patient is encouraged to describe any sensation felt during this process.

Numbness, weakness means test is positive.

# **CERVICAL SPINE**

Check cervical spine movements in all shoulder cases

# CHECK DISTAL NEUROVASCULAR SYSTEM

## **COMMON EXAM CASES**

Massive rotator cuff tear Impingement syndrome Frozen shoulder Milwaukee Shoulder Chronic Posterior or anterior dislocation of the elbow Osteoarthritis shoulder Operated shoulder: Painful TSR Deltoid dehiscence Axillary Nerve palsy Erb's Palsy

Adult Brachial plexus injury Painful Acromio-clavicular joint

