

SPECIAL TESTS

CERVICAL

- Foraminal Compression Test
- Shoulder Depression Test
- Shoulder Abduction Test
- Distraction Test
- Lhermitte's Sign
- Jackson's Test
- Scalene Cramp Test
- Valsalva Test
- Tinel's Sign
- Brachial Plexus Compression Test
- Upper Limb Tension Test (ULTT)
- Romberg's Test
- Vertebral Artery Test
- Naffziger's Test
- Caloric Test
- Sharp Purser Test

Foraminal Compression Test

Px: Sitting

(+) sign: pain radiates to arm toward which head is side flexed

Significance: Cervical Nerve Root Compression

Procedure:

First Phase: compress with head in neutral position

Second Phase: compress with head extended

Third Phase: compression with head extended and rotated to unaffected side.

Othes name: **Spurling's Test**

Shoulder Depression Test

Px: sitting

(+) sign: increase pain

Significance: Nerve Root Compression

Procedure:

side flex patient's head on unaffected side then apply a downward pressure on the opposite shoulder (affected side).

Shoulder Abduction Test

Px: sitting

(+) sign: relief of symptoms

Significance: Nerve Root Compression

Procedure:

abduct patients arm then rest hand or forearm on top of the head.

Distraction Test

Px: Sitting

(+) sign: relief of Pain

Significance: Pressure on the Nerve Roots

Procedure:

place one hand under the patient's chin and the other around the occiput. Slowly lift the head, applying traction to the cervical spine.

Lhermitte's Sign

Px: Long Sitting position

(+) sign: pain radiating down the spine

Significance: Dural or Meningeal Irritation

Procedure:

Flex the patient's head and one hip simultaneously with the leg kept straight.

Jackson's Test

Px: sitting

(+) sign: Pain Radiates into the arm

Significance: Cervical Nerve Root Compression

Procedure:

Rotates patient's head to one side and apply a downward pressure on the head.

Scalene Cramp Test

Px: sitting

(+) sign: increase pain

Significance: Plexopathy / Thoracic Outlet Syndrome

Procedure:

Patient actively rotates the head to the affected side and pulls chin down into the hollow above the clavicle by flexing the cervical spine

Valsalva Test

Px:

(+) sign: increase pain

Significance: increase intrathecal pressure

Procedure:

Patient takes a deep breath and hold it while bearing down, as if moving bowels

Tinel's Sign

Px: sitting with neck slightly flexed

(+) sign: localized pain

Significance: cervical plexus lesion

Procedure:

Tap the area of the Brachial Plexus with a finger along the nerve trunks.

Brachial Plexus Compression Test

Px: sitting

(+) sign: pain radiates into the shoulder

Significance: Mechanical cervical lesions having a mechanical component

Procedure:

Apply firm compression to the brachial plexus by squeezing the plexus under the thumb or fingers

Upper Limb Tension Test 1 (ULTT1)

Shoulder: depression and abduction (110°)

Elbow: Extension

Forearm: Supination

Wrist: Extension

Fingers and Thumb: Extension

Shoulder: —

Cervical Spine: Contralateral side flexion

Nerve Bias: Median Nerve, Anterior Interosseous Nerve,
Nerve Roots C5, C6, C7

Upper Limb Tension Test 2 (ULTT2)

Shoulder: Depression and abduction (10°)

Elbow: Extension

Forearm: Supination

Wrist: Extension

Fingers and Thumb: Extension

Shoulder: Lateral Rotation

Cervical Spine: Contralateral side flexion

Nerve Bias: Median Nerve, Axillary Nerve,
Musculocutaneous Nerve

Upper Limb Tension Test 3 (ULTT3)

Shoulder: Depression and abduction (10°)

Elbow: Extension

Forearm: Pronation

Wrist: Flexion and Ulnar deviation

Fingers and Thumb: Flexion

Shoulder: Medial Rotation

Cervical Spine: Contralateral side flexion

Nerve Bias: Radial Nerve

Upper Limb Tension Test 4 (ULTT4)

Shoulder: Depression and abduction (90°)

Elbow: Flexion

Forearm: Supination

Wrist: Extension and Radial deviation

Fingers and Thumb: Extension

Shoulder: Lateral Rotation

Cervical Spine: Contralateral side flexion

Nerve Bias: Ulnar Nerve, Nerve Roots C8 and T1

Romberg's Test

Px: Standing

(+) sign: Swaying

Significance: Upper Motor Neuron Lesion (UMNL)

Procedure:

Patient stands and is asked to close their eyes and hold the position for 20-30 seconds.

Vertebral Artery Test

Px: Supine

(+) sign: Dizziness / Nystagmus

Significance: Compression of Vertebral Arteries

Procedure:

Move patient's head out and neck into extension and side flexion. Rotate patient's head to the same side and hold for 30 seconds.

Naffziger's Test

Px: Sitting

(+) sign: Pain

Significance: Nerve Root problem or Space Occupying Lesion

Procedure:

Compress patient's jugular veins for 30 seconds then ask the patient to cough.

Caloric Test

Px:

(+) sign: Vertigo

Significance: Inner ear problem

Procedure:

Alternately apply hot and cold test tubes several times just behind the patient's ear on the side of the head.

Sharp Purser Test

Px:

(+) sign: PT feels the head slide backwards during the movement

Significance: Subluxation of the atlas on the axis

Procedure:

Place one hand over the patient's forehead while the thumb of the other hand is placed over the spinous process of the axis to stabilize it. Patient slowly flexes the head while PT presses backward with the palm.

SHOULDER

- Load and Shift Test
- Apprehension Test
- Rockwood Test
- Rowe Test
- Andrew's Anterior Instability Test
- Anterior Drawer Test
- Protzman Test
- Dugas Test
- Posterior Apprehension Test
- Push-Pull Test
- Jerk Test (ULTT)
- Inferior Shoulder Instability Test
- Feagin Test
- Rowe Test for Multidirectional Instability Test
- Clunk Test
- Biceps Tension Test
- Biceps Load Test
- SLAP Prehension Test
- Lateral Scapular Slide Test
- Wall Push-Up Test
- Close Kinetic Chain UE Stability Test
- Acromioclavicular Shear Teas
- Ellman's Compression Rotary Test
- Speed's Test
- Yergason's Test
- Ludington's Test
- Gilchrest's Sign
- Lippman's Test
- Heuter's Sign
- Empty Can Test
- Drop Arm Test
- Lateral Rotation Test
- Hornblower's sign
- Infraspinatus Test
- Teres Minor Test
- Pectoralis Major Contracture
- Lift-off Sign
- Near-impingement Test
- Hawkin's – Kennedy Test
- Tinel's Sign
- Adson Maneuver
- Allen Maneuver
- Halstead Maneuver
- Roos Test
- Wright Test
- Costoclavicular Test

Load and Shift Test

Px: sitting relaxed on the chair

(+) sign:

- a. Normal Laxity = 1-25%
- b. Grade 1 = head rides over the glenoid rim (25-50%)
- c. Grade 2 = head over rides the rim but reduces (>50%)
- d. Grade 3 = head over riding the rim and remains dislocated

Significance: traumatic problems at the glenohumeral Joint

Procedure:

Grasp the humeral head and stabilize the shoulder. Seat the humerus on the glenoid fossa and push anteriorly and posteriorly to check for instability.

Apprehension Test

Px: supine; shoulder abducted 90 and externally rotated

(+) sign: pain and apprehension

Significance: for traumatic instability problems

Procedure:

Slowly apply lateral rotation on shoulder.

Other name: Crank Test

Fulcrum Test

Px: supine; shoulder abducted 90 and externally rotated

(+) sign: pain and apprehension

Significance: for traumatic instability problems

Procedure:

Place a hand under the Glenohumeral Joint then apply lateral rotation.

* a modification of Crank Test

Fowler Sign

Px: supine; shoulder abducted 90 and externally rotated

(+) sign: relief of pain and apprehension

Significance: posterior internal impingement / traumatic instability problems

Procedure:

Apply a posterior directed force to the head of the humerus then further external rotation becomes possible

Other name: Jobe Relocation Test

Surprise Test

Px: supine; shoulder abducted 90 and externally rotated

(+) sign: pain and forward translation of the humeral head

Significance: for traumatic instability problems

Procedure:

Perform “Fowler’s Sign”, after further external rotation, release the posterior force

Other name: Anterior Release Test

Rockwood Test

Px: sitting

(+) sign:

90° - marked apprehension

45° & 120° - some uneasiness and pain

Significance: Anterior Instability

Procedure:

shoulder is abducted to 45°, 90°, then 120°. Then apply external rotation to each angle.

Rowe Test

Px: Supine; hand behind the head

(+) sign: apprehension (Pain) | clunk or grinding sound

Significance: Anterior Instability | Torn anterior labrum

Procedure:

place clenched fist on the posterior humeral head
then apply downward force while arm extends.

Andrew's Anterior Instability Test

Px: supine; shoulder abducted 130° , external 90°

(+) sign: apprehension (Pain) | clunk or grinding sound

Significance: anterior instability | anterior labral tear

Procedure:

stabilize elbow and humerus then grasp the humeral head and lift it forward.

Anterior Drawer Test

Px: supine; abducted 80° - 120° , flexed 20° , externally rotated 30° , hand on PT's axilla

(+) sign: apprehension (Pain) | click sound

Significance: anterior instability | anterior labral tear

Procedure:

stabilize scapula, pushing the spine forward using index and middle finger. Apply a counter pressure on the coracoid then draw the humerus forward

Protzman Test

Px: sitting; abducted 90°, supported on the PT's hip

(+) sign: pain

Significance: Anterior Instability

Procedure:

Palpate anterior head with one hand, other hand on patient's axilla. Push humerus anteriorly and inferiorly.

Dugas Test

Px: sitting

(+) sign: Pain / inability to do the command of the PT

Significance: Anterior Dislocation

Procedure:

Ask patient to place one hand on opposite shoulder and to lower the elbow to the chest.

Posterior Apprehension Test

Px: supine; elevate shoulder to 90°

(+) sign: Apprehension

Significance: Posterior Shoulder Instability

Procedure:

Apply posterior force on the elbow then horizontally adduct and internally rotate the shoulder.

Other name: Stress Test

Push-Pull Test

Px: supine; shoulder abducted 90°, flexed 30°

(+) sign: >50% translation, pain/apprehension

Significance: Posterior Instability

Procedure:

Hold patient's arm on the wrist and humerus. Pull on the arm at the wrist while pushing down on the humerus with the other hand.

Jerk Test

Px: sitting, shoulder flexed 90° and internally rotated

(+) sign: Sudden jerk or clunk

Significance: Recurrent Posterior Instability

Procedure:

Grasp patient's elbow and axially load the humerus proximally. Maintain axial load then move arm to horizontal arm to horizontal adduction with internal rotation.

Inferior Shoulder Instability Test

Px: standing relaxed

(+) sign: sulcus sign

+1 = <1cm

+2 = 1-2cm

+3 = >2cm

Significance: inferior instability / glenohumeral laxity

Procedure:

grasp the patient's elbow then pull it distally.

Other name: Sulcus Sign

Feagin Test

Px: standing; shoulder abducted 90° on PT's shoulder

(+) sign: Presence of sulcus on coracoid process /
apprehension

Significance: Multidirectional Instability

Procedure:

close hands over the humerus and push down and
forward.

Rowe Test for Multidirectional Instability

Px: stands forward flexed 45° at the waist with arms pointing to the floor.

(+) sign: sulcus sign

Significance: Multidirectional Instability

Procedure: hand on the px's shoulder index and middle finger (anterior) thumb (posterior)

Anterior: Shoulder extended 20° - 30° , then push anteriorly

Posterior: Shoulder flexed 20° - 30° , then push posteriorly

Inferior: Shoulder flexed 20° - 30° , then push posteriorly and apply traction

Clunk Test

Px: supine

(+) sign: clunk / grinding sound

Significance: Tear of the Labrum (Bankart)

Procedure:

One hand on posterior aspect of shoulder, one hand holds the humerus above elbow. Fully abduct arm over the px's head. Push anteriorly with the hand over the humeral head (place a fist under the GH joint) . Other hand rotates the humerus into lateral rotation.

Biceps Tension Test

Px: standing; shoulder abducted 90° , elbow extended;
forearm supinated

(+) sign: reproduction of symptoms

Significance: SLAP lesion

Procedure:

apply eccentric adduction force

Biceps Load Test

Px: supine; shoulder abducted 90° and external rotate;
elbow flexed 90°; forearm supinated

(+) sign: Apprehension does not disappear

Significance: integrity of superior labrum

Procedure:

Fully externally rotate shoulder until apprehension, stop external rotation and hold the position. Then patient resist elbow flexion at the wrist.

SLAP Prehension Test

Px: sitting

(+) sign:

first = painful

second = relief of pain

Significance: SLAP Lesion

Procedure:

Patient actively abducts shoulder 90° ; Forearm pronated then horizontally adducts.

Then abducts shoulder 90° ; Forearm supinated, horizontally adducted

Lateral Scapular Slide Test

Px: sitting / standing with arms at the side

(+) sign: >1-1.5cm difference from the original measure

Significance: Scapular Instability

Procedure:

Measure distance from spine to scapula to T2/T3,
inferior angle to T7-T9 or superior angle to T2

* Test patient in shoulder abd: 45°, 90°, 120° and 150°

Wall Push Up Test

Px: standing, arms length on the wall

(+) sign: winging within 5-10reps of push-up

Significance: weakness of scapular muscles

Procedure:

ask patient to do 15-20 wall push ups

Closed Kinetic Chain Upper Extremity Stability Test

Px: prone; on the floor at arms length with hands 36 inches apart.

(+) sign: winging of the scapula

Significance: weakness of scapular muscles

Procedure:

patient touches the other hand then returns to original position. This is done for 15 seconds while PT counts how many reps the patient is able to do.

Acromioclavicular Shear Test

Px: Sitting

(+) sign: abnormal movement of at the AC joint

Significance: Acromioclavicular joint Pathology

Procedure:

Cup hands over the deltoid, one on the clavicle and one on the scapula. Squeeze both hands together.

Ellman's Compression Rotary Test

Px: side lying on unaffected side

(+) sign: pain reproduction

Significance: Glenohumeral Arthritis

Procedure:

Compress humeral head while patient rotates the shoulder medially and laterally.

Speed's Test

Px: Standing

(+) sign: Pain on Bicipital Groove | Pain | weakness

Significance: Bicipital Tendonitis | SLAP II | rupture
biceps

Procedure:

Resist shoulder extension by patient first in
supination then in pronation with elbow extension.

Other names: Biceps Test / Straight Arm Test

Yergason's Test

Px: sitting/standing; elbow 90°, forearm pronated

(+) sign: pain/tenderness | popping out of groove

Significance: Bicipital Tendonitis | torn transverse humeral ligament

Procedure:

resist supination while px externally rotates shoulder.

Ludington's Test

Px: sitting; clasp hands behind head

(+) sign: no contraction evident/palpable

Significance: torn Long Head of Biceps

Procedure:

ask px to contract the biceps.

Gilchrest's Test

Px: Standing

(+) sign: pain on Bicipital Groove

Significance: Bicipital Paratendonitis

Procedure:

ask px to lift 2-3kg/5-7lbs of weight over head with the arm in external rotation.

Lippman's Test

Px: sitting/standing

(+) sign: sharp pain on the bicipital groove

Significance: Bicipital Tendonitis

Procedure:

Hold px arm and flex to 90° with one hand, other hand palpates the biceps tendon 7-8cm below the glenohumeral joint. Then move the biceps tendon side to side.

Heuter's Sign

Px: sitting; Forearm pronated

(+) sign: absence of elbow supination

Significance: ruptured distal biceps tendon

Procedure:

Resist elbow flexion with the forearm pronated.

Supraspinatus Test

Px: standing; shoulder is abducted 90°

(+) sign: pain | weakness

Significance: torn supraspinatus | neuropathy of
suprascapular nerve

Procedure:

shoulder is internally rotated and angled forward
30°, thumb pointing to the floor, then resist.

Other names: Empty Can Test / Jobe Test

Drop Arm Test

Px: standing; shoulder abducted 90°

(+) sign: inability to return arm to side slowly

Significance: Rotator Cuff Tear

Procedure:

ask px to slowly lower arms to the side with some arc movements.

Other Names: Codman's Test

Lateral Rotation Lag Sign

Px: seated/standing; arms at the side

(+) sign: cannot hold the position | pain | increase internal rotation on affected side.

Significance: torn supraspinatus, infraspinatus and subscapularis

Procedure:

passively abducts shoulder to 90° , elbow flexed to 90° and externally rotate. Px holds the position.

Other Names: Infraspinatus “Spring Back” Test

Hornblower's Test

Px: standing; shoulder flexed to 90° , elbow flexed to 90°

(+) sign: inability to external rotate the shoulder

Significance: tear on the teres minor

Procedure:

px external rotates with resistance.

Infraspinatus Test

Px: standing, arm on the side with elbow 90°

(+) sign: pain / inability to resist internal rotation

Significance: infraspinatus strain

Procedure:

Apply a internal rotation force that the px resist.

Teres Minor Test

Px: prone; with one hand on the iliac crest

(+) sign: pain and weakness

Significance: Teres Minor strain

Procedure:

ask px to extend and adduct shoulder against resistance.

Pectoralis Major Contracture Test

Px: supine; hands clasps behind head

(+) sign: elbows do not reach the table

Significance: Tight Pectoralis Major

Procedure:

Lower arm until elbows touch the table

Lift Off Sign

Px: standing; dorsum of hand on back pocket

(+) sign: inability to lift hand off back

Significance: Subscapularis Lesion

Procedure:

ask px to lift hand away from the back.

Neer-Impingement Test

Px: sitting

(+) sign: Pain

Significance: overuse injury to the supraspinatus muscle

Procedure:

Px arm is passively and forcibly fully elevated and shoulder is internally rotated.

Hawkin's Kennedy Impingement Test

Px: standing / sitting

(+) sign: pain

Significance: supraspinatus tendonitis

Procedure:

flex shoulder to 90° then medially rotate the shoulder

Coracoid Impingement Test

Px: standing / sitting

(+) sign: pain

Significance: supraspinatus tendonitis

Procedure:

flex shoulder to 90° , horizontally adduct to 10° - 20°
then medially rotate the shoulder

*a modification of Hawkin's Kennedy Test

Yocum Test

Px: standing / sitting

(+) sign: pain

Significance: supraspinatus tendonitis

Procedure:

Px places hand on the opposite shoulder then PT elevates the elbow.

*a modification of Hawkin's Kennedy Test

Tinel's Sign at the Shoulder

Px: sitting

(+) sign: tingling sensation

Significance: Peripheral Nerve Injury

Procedure:

tap on the scalene triangle on the area of the
brachial plexus

Adson's Maneuver

Px: sitting with head on the ipsilateral

(+) sign: disappearance of pulse

Significance: Thoracic Outlet Syndrome

Procedure:

Locate radial pulse, external rotate and extend the shoulder and instruct px to take a deep breath and hold it.

Allen Maneuver

Px: sitting with head on the contralateral side

(+) sign: disappearance of pulse

Significance: Thoracic Outlet Syndrome

Procedure:

Elbow is flexed to 90°, shoulder is extended and externally rotated horizontally, palpate the radial side.

Halstead Maneuver

Px: neck is hyper extended rotated on contralateral side

(+) sign: disappearance of Radial Pulse

Significance: Thoracic Outlet Syndrome

Procedure:

Find the radial pulse, apply downward traction on the extremity.

Roos Test

Px: shoulder abducted 90°; elbow flexed 90°,
externally rotate

(+) sign: ischemic pain, heaviness, weakness

Significance: Thoracic Outlet Syndrome

Procedure:

ask px to close and open hands for 3mins

Other names: Aer Test / Hands-up Test

Wright Test

Px: shoulder hyper abducted, elbow extended and externally rotated

(+) sign: Disappearance of pulse

Significance: Thoracic Outlet Syndrome

Procedure:

Instruct px to take a deep breath while palpating for the radial pulse.

Costoclavicular Test

Px:

(+) sign: disappearance of pulse

Significance: Thoracic Outlet Syndrome

Procedure:

Locate radial pulse, draw shoulder down and back.

Other Name: Military Base

ELBOW

- Ligamentous Valgus Instability Test
- Milking Maneuver
- Ligamentous Varus Instability Test
- Posterolateral Rotary Drawer Test
- Stand – Up Test
- Lateral Epicondylitis Method 1
- Lateral Epicondylitis Method 2
- Lateral Epicondylitis Method 3
- Medial Epicondylitis
- Tinel’s Sign at the Elbow
- Wartenberg’s Sign
- Elbow Flexion Test
- Pronator Teres Syndrome
- Pinch Grip Test

Ligamentous Valgus Instability Test

Px: sitting; elbow flexed 90°

(+) sign: decrease laxity / pain

Significance: Valgus Instability (medial collateral ligament)

Procedure:

Stabilize elbow with 1 hand and above px's wrist with the other. Apply an abd. Force to the distal forearm.

Milking Maneuver

Px: sitting; elbow flexed 90⁰, forearm supinated

(+) sign: Reproduction of Symptoms

Significance: Partial tear to the medial collateral ligament

Procedure:

Graps the px's thumb and pull it importing a valgus stress to the elbow

Ligamentous Varus Instability Test

Px: elbow slightly flexed

(+) sign: laxity, soft end feel

Significance: injury to the lateral collateral ligament

Procedure:

Stabilize arm and apply varus force to the distal forearm.

Posterolateral Rotary Drawer Test

Px: supine, arm over head; elbow flexed 40° - 90°

(+) sign: reproduction of symptoms

Significance: tear on the lateral collateral ligament / posterolateral instability at the elbow

Procedure:

Stabilize the humerus, radius and ulna is pushed posterolaterally.

Stand-Up Test

Px: seated on a chair w/ no arm rests; forearm supinated

(+) sign: reproduction of symptoms

Significance: injury to the posterior band of medial collateral ligament

Procedure:

instruct px to lift bottom off of the seat using his/her arms.

Lateral Epicondylitis (Method 1) Test

Px: sitting; elbow flexed 90⁰; forearm supinated

(+) sign: pain

Significance: Tennis Elbow Epicondylitis

Procedure:

Palpate the lateral epicondyle. Ask the px to make a fist , pronate forearm, radially deviate and extend the wrist while PT resist the motion.

Other names: Tennis Elbow or Cozen's Test

Lateral Epicondylitis (Method 2) Test

Px: sitting; elbow flexed 90°; forearm supinated

(+) sign: pain

Significance: Tennis Elbow Epicondylitis

Procedure:

Palpate the lateral epicondyle. Passively pronate the px's forearm; flex the wrist fully and extend the elbow.

Other names: Tennis Elbow or Mill's Test

Lateral Epicondylitis (Method 3) Test

Px: sitting; elbow flexed 90⁰; forearm pronated

(+) sign: pain

Significance: Tennis Elbow Epicondylitis

Procedure:

Resist the extension of the 3rd digit of the hand.
Distal to proximal interphalangeal joints.

Other names: Tennis Elbow Test

Medial Epicondylitis Test

Px: sitting; elbow flexed 90⁰; forearm pronated

(+) sign: pain

Significance: Golfer's elbow medial epicondylitis

Procedure:

Palpate the medial epicondyle. Px's forearm is passively supinated and the PT extends the elbow and wrist.

Other names: Golfer's Elbow

Tinel's Sign at the Elbow

Px: sitting with the elbow flexed

(+) sign: Tingling Sensation

Significance: Regeneration of Fibers

Procedure:

tap the ulnar nerve.

Wartenberg's Sign

Px: sitting with hands resting on the table

(+) sign: Inability to squeeze little finger

Significance: Ulnar Nerve Neuropathy

Procedure:

Passively spread the fingers apart and ask the patient to them together

Elbow Flexion Test

Px:

(+) sign: Tingling or paresthesia in the ulnar nerve distribution of the forearm and

Significance: Cubital Tunnel Syndrome

Procedure:

Fully flex the elbow, wrist extended, shoulder is abducted and depressed. Hold this position for 3-5 minutes.

Test for Pronator Teres Syndrome

Px: sitting; elbow flexed 90°

(+) sign: Tingling or paresthesia in the median nerve distribution

Significance: Pronator Teres Syndrome

Procedure:

Resist pronation and the patient extends.

Pinch Grip Test

Px:

(+) sign:

Normal: tip-to-tip

Abnormal: pulp-to-pulp

Significance: Entrapment of the Anterior Interosseous
nerve

Procedure:

ask the patient to pinch the tips of the index and
thumb together.

FOREARM, WRIST & HAND

- Test For Tight Retinacular Ligament
- Lunotriquetral Ballottement Test
- Finger Extension Test
- Murphy's Sign
- Watson's Test
- Piano Keys Test
- Finkelstein Test
- Sweater Finger Sign
- Test For Extensor Hood Rupture
- Boyes Test
- Bunnel-littler Test
- Linburg's Sign
- Tinel's Sign At The Wrist
- Phalen's Test
- Reverse Phalen's Test
- Carpal Compression Test
- Froment's Sign
- Egawa's Sign
- Wrinkle Test
- Ninhydrin Test
- Dellon's Moving 2-point Discrimination Test
- Allen Test
- Hand Volume Test

Test for Tight Retinacular Ligament

Px: PIP joint is in neutral | PIP joint is flexed

(+) sign: (-) flexion | (+) flexion

Significance: Collateral ligaments or Capsule is tight |

Only the collateral ligament is tight

Procedure:

Flex the distal interphalangeal joint.

Other Name: Haines-Zancolli Test

Lunotriquetral Ballottement Test

Px:

(+) sign: Pain, Laxity, Crepitus

Significance: Lunotriquetral Instability

Procedure:

Grasp the triquetrium and lunate. Move the lunate anteriorly and posteriorly.

Other Name: Reagan's Test

Finger Extension Test

Px: Sitting; wrist in flexion

(+) sign: Pain

Significance: Radiocarpal or midcarpal instability, scaphoid instability, inflammation, Kienböck's Disease

Procedure:

Hold the px's wrist and ask the px to extend the fingers. Resist movement at the radiocarpal joints.

Other Name: Shuck Test

Murphy's Sign

Px:

(+) sign: 3rd MCP joint is in line with and 2nd and 4th MCP joint.

Significance: Lunate Dislocation

Procedure:

Ask the px to make a fist.

Watson Test

Px: Sitting; Forearm is pronated on the lap

(+) sign: Pain

Significance: Scaphoid Subluxation

Procedure:

Ulnar deviate the wrist with slight extension.

Stabilize the scaphoid. Radially deviate and slightly flex the hand.

Other Name: Scaphoid Shift Test

Piano Keys Test

Px: sitting; forearm pronated

(+) sign: Difference in Mobility, pain and tenderness

Significance: Distal radioulnar joint instability

Procedure:

Push down the distal ulna

Finkestein Test

Px: Make a fist with the thumb inside the fingers

(+) sign: pain over the abductor pollicis longus and extensor pollicis brevis tendons

Significance: Hoffmann's disease, de Quervain's disease, paratendonitis in the thumb

Procedure:

Stabilize forearm and ulnar deviate the wrist.

Sweater Finger Sign

Px:

(+) sign: (-) flexion of one of the distal phalanx

Significance: Ruptured flexor digitorum profundus tendon

Procedure:

Instruct px to make a fist

Test for Extensor Hood Rupture

Px: Flex PIP of finger 90° at the edge of the table

(+) sign: Little Pressure from the middle phalanx

Significance: Torn Central Extensor Hood

Procedure:

Ask the px to extend the proximal interphalangeal joint while PT palpates for the middle phalanx

Boyes Test

Px:

(+) sign: Unable to flex DIP joints

Significance: torn central extensor hood

Procedure:

Hold finger in slight extension at the PIP joint. Ask px to flex the DIP joint.

Bunnel – Littler Test

Px: a. extend MCP jt.
b. slight flexed MCP jt.

(+) sign: a. (-) flexion
b. fully flexed
c. not fully flexed PIP jt.

Significance:

- a. tight intrinsic muscles or contracture of joint capsule
- b. intrinsic muscles tightness
- c. Contracture of joint capsule

Procedure:

Flex PIP joint.

Other name: Intrinsic Plus , Finochietto – Bunnel

Linburg's Sign

Px:

(+) sign: Loss of Motion, Pain

Significance: Tendinitis at the interconnection between flexor pollicis longus and flexor indices

Procedure:

Fully flex the thumb then extend the index finger

Tinel's Sign at the Wrist

Px:

(+) sign: Tingling or Paresthesia in the median nerve distribution

Significance: Carpal Tunnel Syndrome

Procedure:

tap over the carpal tunnel at the wrist.

Phalen's Test

Px:

(+) sign: tingling or paresthesia in the median nerve distribution

Significance: Carpal Tunnel Syndrome

Procedure:

Flex the wrist maximally and hold for 1 minute.

Reverse's Phalen's Test

Px:

(+) sign: Tingling or Paresthesia in the median nerve distribution

Significance: Carpal Tunnel Syndrome

Procedure:

Extend wrist maximally and press the carpal tunnel for 1 minute.

Other Name: Prayer Test

Carpal Compression Test

Px: supinated

(+) sign: tingling or paresthesia in the median nerve distribution

Significance: Carpal Tunnel Syndrome

Procedure:

Grasp hand then apply direct pressure over the carpal tunnel for 30 seconds

*a modification of Reverse Phalen's Test

Froment's Sign

Px: Grasp a piece of paper between thumb and index

(+) sign: thumb flexion | thumb hyperextension

Significance: paralysis of adductor pollicis | Jeanne's Sign (Ulnar Nerve Paralysis)

Procedure:

Pull paper away from patient

Egawa's Sign

Px: Flex middle digit

(+) sign: unable to do the motion

Significance: Ulnar Nerve Palsy

Procedure:

Ask the patient to alternately ulnar deviate and radial deviate the finger

Wrinkle Test

Px:

(+) sign: no wrinkling

Significance: Denervated

Procedure:

Place patient's fingers in warm water for 5-20 minutes

Ninhydrin Sweat Test

Px: wait for clean hand to sweat

(+) sign: no color change (Normal: White – purple)

Significance: Nerve Lesion

Procedure:

Moderately press against good quality bond paper for 15 seconds. Trace with pencil and spray the paper with triketohydrindene (Ninhydrin) spray. Leave for 24 hrs to dry.

Dellon's Moving 2-point Discrimination Test

Px: Eyes are closed and the hand is cradled in the examiners hand

(+) sign: 10 mm difference between the right and left hand

Significance: measures the quickly adapting mechanoreceptor system

Procedure:

move 2 blunt points from proximal to distal along the long axis of the limb or digit, starting with a distance of 8mm b/n the points

Allen Test

Px: open and close hand several times.

(+) sign: flushing of the hand

Significance: Patency of the radial and ulnar arteries
(which artery provides the major blood supply to the hand)

Procedure:

Compress radial and ulnar arteries. Px opens their hand while pressure is maintained. Release one artery at a time.

Hand Volume Test

Px:

(+) sign: 30-50mL difference between right and left hands. (Normal = 10mL)

Significance: Swelling, edema (Normal = dominant)

Procedure:

Use a volumeter.