

Test	Region	Action	Positive Finding	Indication
ROM	Cervical Spine	Flexion, extension, R & L lateral flexion, L & R rotation	Reduced ROM using goniometer or inclinometer, pain, tightness, tenderness, spasm	Cervical pathology
Palpation		1. Spinal processes, 2. bilat beside processes. 3. bilat over laminar groove. 4. bilat TVP's. 5. muscle pathways in cervical area	Pain, tightness, tenderness	Nerve, muscular and/or skeletal pathology (according to location)
Spurling / Max Foramen Compression		Extend head and rotate to evaluated side, press on vertex	Local pain or ipsilateral pain, radiating to arm	Cervical nerve root impingement / pathology
Foramen Distraction		Lifting at occiput, thumbs on mastoid, fingers on temporal	Relief of pain sx, esp if radiating pain is reduced	
Vertebral Artery		Supine patient, support head with both hands, extend and laterally rotate cervical spine	Dizziness, LoC, vision issues	Partial or complete occlusion of vertebral artery
Rust's Sign		Patient hold head when moving, sitting, standing. lying	Patient performs sign as guarding	Severe cervical injury
Bakody's		Patient rests arm of top of head	Pain relief	Nerve impingement C6, C7, C8, T1 or brachial plexus
Tinel's Tapping @ Erb's Point		Tap firmly at C6 TVP, btwn med & lat heads of SCM	Pain or lightning zing, N & T in fingers	Brachial Plexus pathology
Eaton's or Brachial Plexus		Push on temple and pull ipsilateral arm downward	Neck pain, N & T in fingers	
Adson's & Reverse Adson's		Extend and ext rotate arm, feel radial pulse, turn head twd and deep breath. Reverse = turn head away.	Loss of radial pulse	Thoracic Outlet Syndrome. Scalene entrapment
Swallowing		Patient swallows	Dysphagia and/or Pain	Anterior cervical spondylosis
Hoffman's reflex		Flick the middle (3 rd) digit in the direction of the extensor muscles	Flexion of 1 st & 2 nd digits	Spinal chord lesion

Test	Region	Action	Positive Finding	Indication
ROM	Lumbar Spine	Flexion, extension, R & L lateral flexion, L & R rotation	Reduced ROM using goniometer or inclinometer, pain, tightness, tenderness, spasm	Lumbar pathology
Palpation		1. Spinal processes, 2. bilat beside processes. 3. bilat over laminar groove. 4. muscle groups & pathways in lumbo-sacral & sacro-iliac areas	Pain, tightness, tenderness	Nerve, muscular and/or skeletal pathology (according to location)
Kemp's		Stabilize contralateral shoulder from the rear, passively extend and rotate patient's spine.	Ipsilateral > pain, and/or contralateral < pain	Lumbar pathology (facet joint)
Lasegue's Unilateral Leg Raise		Raise leg to ceiling. Stop at pain point. Lower leg and ask patient to flex neck, while dorsiflexing foot.	Pain (looking for lumbar, not hamstring or calf pain)	L1 through 5 nerve impingement
Bilateral Straight Leg Raise		Raise both legs simultaneously	Pain at specific ROM angles	<70° = sacral, > 70° = lumbar, 90° = no issue
Thomas		Sitting on edge of bed, lie back, grab one knee to chest, allow other leg to relax	Inability to lay thigh flat, or if leg does not rest in 0-45° range	Iliopsoas and hip flexor test
Trendelenburg		Stand on one leg	Inability to maintain balance, hip deviation or collapse	Ipsilateral gluteus medius pathology
Patrick / Faber		Flex, abduct & ext rotate thigh, placing heel on opposite thigh. Press on contralateral knee & ipsilateral iliac crest	Pain in ant thigh, hip or S-I joint	S-I joint dysfunction (Note: FABER & Yeoman's also test coxo-femoral joint).
SI joint stress		Load joint: 1. supine crossed hands over ASIS. 2. lying on side hands over iliac crest. 3. crossed hands prone over sacral apex	Pain	
Gillet's		Place thumbs on PSIS have patient put hands on wall and lift one thigh to 90°. PSIS on that side should rotate post and inf.	PSIS does not rotate	
Yeoman's		Patient prone. Apply downward pressure while lifting thigh	S-I pain	

Test	Region	Action	Positive Finding	Indication
ROM	Shoulder 1	Abd, add, ext, flex, int rotation, ext rotation, plus scapular elevation & retraction	Reduced ROM using goniometer or inclinometer, pain, tightness, tenderness, spasm	Nerve, muscular and/or skeletal pathology (according to location)
Palpation		1. Cervical & thoracic spinal processes, 2. bilat beside processes. 3. bilat over laminar groove. 4. muscles in peri-spinal cervical and thoracic areas, 5. neck, clav, scap, G-H, A-C, muscle groups	Pain, tightness, tenderness	
Tinel's Tapping @ Erb's Point		Tap firmly at C6 TVP, btwn med & lat heads of SCM	Pain or lightning zing, N & T in fingers	Brachial Plexus pathology
Eaton's or Brachial Plexus		Push on temple and pull ipsilateral arm downward	Neck pain, radicular arm pain, N & T in fingers	
Adson's & Reverse Adson's		Ext and ext rotate arm, feel radial pulse, turn head twd and deep breath. Reverse = turn head away.	Loss of radial pulse	Thoracic Outlet Syndrome Scalene entrapment
Neer's		Stabilize scapula, passive and maximal fwd flex arm	Subacromial pain	Subacromial impingement &/or supraspinatus pathology
Crossover		Fully horiz adduct and over-pressure arm	Pain (various locations poss)	Superior pain = A-C, Anterior pain = subscap, supraspin, l-h bicep, Posterior pain = infraspin, teres minor, post capsule
Empty Can		Raise arm to 90°, int rotate arm thumb down, apply pressure downward to resistance	Post & sup scap pain	Supraspinatus trauma
Speed's		Flex arm to 90°, palm up, fist closed, apply downward pressure to resistance	Ant pain	Bicipital tendinitis

Test	Region	Action	Positive Finding	Indication
Apply's Scratch (3 of them)	Shoulder 2	1. Across to opp shoulder. 2. behind head and downward. 3. behind back and upward	Asymmetrical and/or reduced ROM	1. = G-H add & int rotation. 2. = G-H abd & ext rotation & scap up rotation & elev. 3. = G-H add & int rotation & scap dwn rotation & retract.
Grind, Clunk		Patient is supine. Grind = compression & rotation. Clunk = abd, ext rotation overhead and ant push w circumduction of humeral head.	Grinding, clicking, pain	Glenoid labrum tear
Piano key		Apply downward pressure to distal clavicle	Clavicular 'bounce', A-C deformity	A-C separation
Cubical Shoulder		Observation of shoulder morphology	Shoulder deformity	G-H separation / dislocation
Feagin's		Abduct arm to 90°, elbow extended, rest wrist on examiner's shoulder. Examiner clasps hands and press down on upper humerus	Excessive humeral gliding	G-H instability
Drop Arm		Passive abduction and drop	Inability to control return of arm to side	Rotator Cuff pathology
Elbow percussion		Tap elbow at olecranon	Pain in upper arm	Humeral fracture

Test	Region	Action	Positive Finding	Indication
ROM	Elbow	Flexion, extension	Reduced ROM using goniometer or inclinometer, pain, tightness, tenderness, spasm	Humero-ulnar dysfunction
		Supination, pronation		Humero-radial dysfunction
Palpation		Lat and med humeral epicondyle, tip of elbow, muscle groups	Pain, tightness, tenderness	Nerve, muscular and/or skeletal pathology (according to location)
Varus & Valgus Stress		30° flexion to unlock elbow, then apply pressure on ulnar or radial side of elbow.	Pain on opposite side of pressure	Collateral ligament injury. (Note: Ulnar Coll Lig = most common from pitching / throwing)
Mill's		Examiner passively pronates forearm, then flexes the wrist during elbow extension	Brachoradialis and/or lateral epicondyle pain. Pain in area of LI-10	Lateral epicondylitis = Tennis Elbow (that would be LI-ten-ish elbow 😊)
Cozen's		Using closed fist, patient pronates forearm and extends wrist against resistance		
'Middle Finger'		Press down against extended middle finger		
Golfer's Elbow		Patient supinates arm, flexes fist. Examiner attempts to extend wrist against resistance	Medial pain	Medial epicondylitis = Golfer's Elbow

Test	Region	Action	Positive Finding	Indication
ROM	Wrist	Flexion, extension, ulnar and radial deviation	Reduced ROM using goniometer or inclinometer, pain, tightness, tenderness, spasm	Nerve, muscular and/or skeletal pathology (according to location)
Palpation		Radial and ulnar styloid processes, carpal & metacarpal bones, muscles of wrist and hand,	Pain, tightness, tenderness	
Phalen's & Reverse Phalen's		Phalen's = press backs of hands together. Reverse = press palms together. 1 minute	Pain, tingling, electric sensation in C6 dermatome (esp 1 st & 2 nd digits)	Carpal Tunnel Syndrome
Tinel's Tapping		Tap @ site of medial nerve (~PC-7)		
Finkelstein		Patient makes fist fingers over thumb. Examiner deviates wrist to ulnar side	Pain over abd poll long & ext poll brev.	Tenosynovitis (de Quervain's Dz)
Percussion	Fingers	Tap end of affected finger (jing well point)	Pain localized to specific joint segment of finger	Fracture in digit
		Tip of 3 rd MCP	Pain	Scaphoid fracture
		Tip of 4 th MCP		Lunate fracture

Test	Region	Action	Positive Finding	Indication
ROM	Hip	Flex, ext, abd, add, int and ext rotation	Reduced ROM using goniometer or inclinometer, pain, tightness, tenderness, spasm	Nerve, muscular and/or skeletal pathology (according to location)
Palpation		Lumbar, buttock, hip & thigh musculature, great trochanter & iliac crest	Pain, tightness, tenderness	
Trendelenburg		Stand on one leg	Inability to maintain balance, hip deviation, collapse	Ipsilateral gluteus medius pathology
Patrick's or FABER		Flex, abduct & ext rotate thigh, placing heel on opposite thigh. Press on contralateral knee & ipsilateral iliac crest	Pain in ant thigh, hip or buttock	Coxo-femoral joint dysfunction or piriformis pathology
Neleton Line		Neleton line connects ASIS & ischial tuberosity. Patient lies on unaffected side, flexes hip 90-120°	Gt trochanter >1cm sup to line	Femoral fracture or hip dislocation
Bilateral Hip w Knee Flexion		Soles of feet pressed together with knees flexed and outward rotation of hip	Pain in medial aspect of hip	Adductor femoris pathology
Piriformis 1		Supine patient lies with legs extended. Outwardly rotate affected leg against resistance	Pain in ipsilateral buttock	Piriformis pathology
Piriformis 2 = FAIR		Supine patient, flex hip to 90°, bring knee to opposite shoulder (keep ankle parallel to body long axis). Flex, add, int rotation.		
Ober's		Patient lies on side, abduct thigh and extend 10-15°. Allow leg to naturally rest (adduct) behind other leg.	Inability of foot to touch table	IT band tightness

Test	Region	Action	Positive Finding	Indication
ROM	Knee	Flex, ext	Reduced ROM using goniometer or inclinometer, pain, tightness, tenderness, spasm	Nerve, muscular and/or skeletal pathology (according to location)
Palpation		Skeletal landmarks of knee, musculature of thigh, knee, shin and calf	Pain, tightness, tenderness	
Ballotable patella		Patient supine. Push and sweep thigh several times. Old patella and then press 2-3x	Floating, fluid present	Hydrarthrosis (fluid in the joint)
Over-extension		Patient supine, legs straight. Push against sup border of patella as patient extends leg	Anterior pain	Meniscus lesion
Clark's Sign		Patient supine. Push against sup border of patella as patient contracts quads	Pain under knee cap	Chondromalacia
Half Squat		One leg squat 2-3x	Pain in knee or weakness	
Anterior & Posterior Drawer		Patient supine, affected knee flexed. Examiner sits on patient's foot, grasps upper part of lower leg, pull and push	Increased movement and space	Pulling > space = ACL Pushing > space = PCL
McMurray		Patient supine. Hold and stabilize the knee with one hand, hold ankle with other. Rotate int & ext 2-3x	Popping or clicking	Med or lat meniscus tear
Valgus		Apply force from lat knee to med side (hold above ankle and rotate little toe outward)	Pain and/or > ROM	MCL tear
Varus		Apply force from med knee to lat side (hold ankle from lat side and rotate big toe inward)	Pain and/or > ROM	LCL tear
Apley's Compression		Patient prone, knee flexed to 90°. Push down on heel and rotate lower leg	Clicking and popping, pain	Meniscus tear

Test	Region	Action	Positive Finding	Indication
ROM	Ankle	Plantar & dorsi flexion, inversion, eversion	Reduced ROM using goniometer or inclinometer, pain, tightness, tenderness, spasm	Nerve, muscular and/or skeletal pathology (according to location)
Palpation		Skeletal landmarks of ankle, tarsal bones and digits, musculature of calf, shin and foot	Pain, tightness, tenderness	
Inversion		Stabilize distal tibia & invert foot (turns sole twd mid line of body)	Loose end feel	Calcaneofibular ligament
Eversion		Stabilize distal tibia & evert foot		Deltoid & medial talotibial ligament pathology
Thompson's		Patient prone, foot hanging off table,. Squeeze calf muscle	Lack of plantar flexion response	Achilles tendon rupture
Anterior & Posterior Drawer		Patient either seated or prone. Stabilize distal tibia w foot in normal position for standing. Pull and / or push foot	Loose end feel, increased movement & space	Pulling = ant talofibular ligament Pushing = post talofibular ligament
Feiss Line		Patient sits on table. Mark inf tip of med malleolus and base of 1 st MTP joint. Draw line (should go through the navicular tub. Patient stands.	Navicular tuberosity falls below line	Functional pes planus (Platypodia). Poss hyperpronation of foot, int rotation of leg, piriformis & iliopsoas strain, sciatic notch & L5-S1 pathology

Test		Region	Action	Positive Finding	Indication
Listening	LU	Chest	Vocal Fremitus (say '99') & Tactile Fremitus (tap and listen)	Vibratory tremors	Absent = Pleural effusion or pneumothorax. Increased = Pneumonia or Asthma
Auscultation			Lung Sounds	2 areas upper chest front (above & below clavicle), 4 areas back (above & below scapula)	Wheezing = small airway obstr. Stridor = hi pitch upper airway ostr. Rales = bubbles, LU fluid. Ronchi = deeper noise, thick mucus. None = pneumothorax.
Percussion			Tapping (side to side using ladder top to bottom)	Resonant = Normal. Dull (woody) = Pneumonia. Dull (stony) = Pleural effusion. Hyper-resonant = Asthma or Pneumothorax.	
Observation			Chest Movement	Normal = normal. Asymmetrical = pneumonia. Bulging (one-sided) = Pleural effusion. No mvt on one side = Pneumothorax. Symm mvt = Asthma.	
			Rate	Normal = 12-20 breaths / minute, SoB = 20-30. Hyperventilation = 40+	
Observation & Inspection	HT		Skin, nails, lips, eyes, swelling, breathing, sweating, pain	Cyanosis (nails/lips), clubbing (fingers), edema, SoB, diaphoresis, chest pain, referred pain	
Pulse rate			Radial and Carotid pulse	1. Look for equality on both sides. 2. Refer for ECG if <50 BPM (non-athlete) or >120 BPM	
Auscultation			Thoracic & Carotid	Carotid bruit (turbulence = Carotid Art Dz). Thoracic : 2 nd intercostal Rt. = Aorta , 2 nd intercostal Lt = Pulmonary , Left Sternal edge = Tricuspid . Sternal apex & /or Mid-clav line in 5 th intercostal = Mitral	
Blood pressure			Normally left arm, compare L & R	210/120 = 911, 180/110 = refer out, >160/100 = stage 2 HTN monitor each visit, >140/90 = Stage 1 HTN monitor each visit, >120/80 = Pre-HTN monitor each visit, <120/80 = Normal	

Test	Region	Action	Positive Finding	Indication
Palpation	Abdomen	Side to side ladder top to bottom RUQ > Epigast > LUQ > LL > Umb > RL > RLQ > Suprapub > LLQ	Pain, tightness, tenderness, fluid, firmness	Various possible: (consider LV, GB, SP, Pancreas, GI, KI, BL, Gyn).
LV		Push up from RLQ to RUQ	Feel LV as patient inhales and holds breath	Hepatomegaly
GB		Push up under 9 th intercostal space on Rt side at mid-clav line	+ve Murphy's sign	Acute cholecystitis
SP		Push up from RLQ to LUQ	Feel SP only if enlarged	Splenomegaly
KI		Feel w one hand above and one below flank, flip up on lwr hand	Enlarged KI will bounce into upper hand	KI inflammation (refer out)
		Percussion of KI @ costovertebral angle		Pyelonephritis (refer out)
BL		Palpate from umbilicus to pubic symphysis	Pain	Poss BL infx (ask q's)
Appendix		Palpate RLQ Palpate LLQ	RLQ Mc Burney's point rebound pain LLQ Roving's Sign rebound pain	Red flag possible appendicitis
Ascites		Palpate on far side. Note fluid & movement	Shifting dullness. Ask patient to roll toward examiner = fluid will move downhill	Abdominal fluid
Abdominal Aorta		Palpate along Ren line supra-umbilical	expansive	911 Red Flag poss. aneurysm
Auscultation		Listening = ST, SI & LI, Abd Aorta, Renal Artery	Gut gurgling sounds, aortic sounds	Hypo- or Hyper- activity