

# Medical Tests, Signs & Maneuvers Guide

**Achilles Squeeze test:** For Achilles tendon rupture. Squeezing the calf muscle fails to produce plantar flexion of the ankle joint. Also called Simmons Test, Thompson test.

**Addis test:** For determination of leg length discrepancy. With patient in prone position, flexing the knees to 90 degrees reveals the potential discrepancies of both tibial and femoral lengths.

**Adson's maneuver:** See under Adson's test

**Adson's test:** For thoracic outlet syndrome. With the patient in a sitting position, his hands resting on thighs, the examiner palpates both radial pulses as the patient rapidly fills his lungs by deep inspiration and, holding his breath, hyperextends his neck and turns his head toward the affected side. If the radial pulse on that side is decidedly or completely obliterated, the result is considered positive. Also called Adson's maneuver.

**Allen test:** For occlusion of radial or ulnar artery. A method of determining if radial and ulnar arteries communicate through the two palmar arches. Both arteries are occluded digitally by making a fist repeatedly. First one artery is released, then the other, to observe pattern of capillary refill in the hand.

This can be performed with Doppler placed on the digits during test. The test is valuable prior to an invasive procedure on the arteries at the wrist,

**Allis' sign:** Relaxation of the fascia between the crest of the ilium and the greater trochanter: a sign of fracture of the neck of the femur.

**Amoss' sign:** In painful flexure of the spine, the patient, when rising to a sitting posture from lying in bed, does so by supporting himself with his hands placed far behind him in the bed.

**Angelescu's sign:** Inability to bend the spine while lying on the back so as to rest on the head and heels alone, seen in tuberculosis of the vertebrae.

**Anterior drawer sign:** See under drawer sign.

**Anterior tibial sign:** Involuntary contraction of the tibialis anterior muscle when the thigh is forcibly flexed on the abdomen; seen in spastic paraplegia.

**Anvil test (hips):** For early hip joint disease of diseased vertebrae. A closed fist striking a blow to the sole of the foot with leg extended produces pain in the hip or vertebrae.

**Anvil test (neck):** For vertebral disorders. A closed fist striking a blow to the top of the head elicits pain in the vertebra(e).

**Apley test:** For differentiating ligamentous from meniscal injury. Tibial rotation on femur with traction or compression with the patient prone and knee flexed. Also called Apley sign.

**Axial loading:** Putting pressure on top of the head to identify nerve damage in the neck. Also used to medically disprove evidence of a low back problem.

**Babinski reflex:** For loss of brain control over lower extremities. Scraping the soles causes toes to pull up. Also called Babinski reflex, toe sign.

**Babinski's sign:** 1. Loss or lessening of the Achilles tendon reflex in sciatica; this distinguishes it from hysteric sciatica. 2. Babinski's reflex. 3. In hemiplegia, the contraction of the platysma muscle in the healthy side is more vigorous than on the affected side, as seen in opening the mouth, whistling, blowing, etc. 4. The patient lies supine on the floor, with arms crossed upon his chest, and then makes an effort to rise to the sitting posture. On the paralyzed side, the thigh is flexed upon the pelvis and the heel is lifted from the ground, while on the healthy side the limb does not move. This phenomenon is repeated when the patient resumes the lying posture. It is seen in organic hemiplegia, but not in hysterical hemiplegia. 5. When the paralyzed forearm is placed in

supination, it turns over to pronation; seen in organic paralysis. Called also pronation sign.

**Bekhterev's test:** The patient seated in bed is directed to stretch out both legs; in sciatica he cannot do this, but can stretch out each leg in turn.

**Bench test:** For nonorganic back pain. In normal hip motion, the patient should be able to bend over and touch the floor kneeling on a 12-inch high bench; not being able to implies a nonorganic (or psychologic) back pain. Also called Burns test.

**Bowstring sign:** With leg raised with knee bent in same position, pain is felt in the back of limb pressing on the popliteal fossa. Increased pain is sign of nerve irritability.

**Bracelet test:** The production of pain on moderate lateral compression of the lower ends of the radius and ulna; observed in rheumatoid arthritis.

**Bragard's sign:** With the knee stiff, the lower extremity is flexed at the hip until the patient experiences pain; the foot is then dorsiflexed. Increase of pain points to disease of the nerve root.

**British test:** For knee pain and/or injury. Compression of patella during active quadriceps contraction as knee is extended elicits pain.

**Brudzinski's sign:** For meningitis. Flexion of the neck forward results in flexion of the hip and knee;

when passive flexion of the lower limb on one side is made, a similar movement will be seen in the opposite limb. Also called neck sign, contralateral sign.

**Burns test:** See under bench test

**Cantelli's sign:** Dissociation between the movements of the head and eyes; as the head is raised the eyes are lowered and vice versa. Called also doll's eye sign.

**Chaddock's sign:** For upper motor neuron loss (brain). The big toe extends when irritating the skin in the external malleolar region; indicates lesions of the corticospinal paths. Also called external malleolus sign, Chaddock reflex.

**Circumduction maneuver:** A maneuver for the thumb; any general test of motion involving a rotation action of a group of joints; a range of motion examination.

**Cleeman's sign:** Creasing of the skin just above the patella, indicative of fracture of the femur with overriding of fragments.

**Codman's sign:** In rupture of the supraspinatus tendon, the arm can be passively abducted without pain, but when support of the arm is removed and the deltoid contracts suddenly, pain occurs again.

**Cogwheel phenomenon:** While testing the strength of a muscle, the patient exhibits jerky motions that are neither rhythmic nor equal and represent pretending or protection from pain.

**Comolli's sign:** A sign of scapular fracture consisting in the appearance in the scapular region, shortly after the accident, of a triangular swelling reproducing the shape of the body of the scapula.

**Contralateral sign:** See under Brudzinski's sign

**Contralateral straight leg raising test:** For sciatica. When the leg is flexed, the hip can also be flexed, but not when the leg is held straight. Flexing the sound thigh with the leg held straight causes pain on the affected side. Also called Fajersztajn's crossed sciatic sign.

**Coopernail sign:** Ecchymosis on the perineum and scrotum or labia; a sign of fracture of the pelvis.

**Dawbarn's sign:** In acute subacromial bursitis, when the arm hangs by the side, palpation over the bursa causes pain but when arm is abducted, this pain disappears.

**Dejerine's sign:** Aggravation of symptoms of radiculitis produced by coughing, sneezing, and straining at stool.

**Demianoff's sign:** A sign that permits the differentiation of pain originating in the sacrolumbalis muscles from lumbar pain of any other origin. The sign is obtained by placing the patient in dorsal decubitus and lifting his extended leg. In the presence of lumbago this produces a pain in the lumbar region which prevents raising the leg high enough to form an angle of ten degrees, or even less, with the table or bed on which the

patient reposes. The pain is due to the stretching of the sacrolumbalis.

**Desault's sign:** A sign of intrascapular fracture of the femur, consisting of alternation of the arc described by rotation of the great trochanter, which normally describes the segment of a circle, but in this fracture rotates only as the apex of the femur rotates about its own axis.

**Doll's eye sign:** See Cantelli's sign.

**Drawer sign:** For ligamentous instability or ruptured cruciate ligaments, With the patient supine and knee flexed to 90 degrees, the sign is positive if knee is not displaced abnormally in a posterior direction with knee pulled forward. Also called an anterior drawer sign, meaning the anterior cruciate is lax or ruptured.

**D.T.P. sign:** (distal tingling on percussion), Tinel's sign

**Dugas' test:** A test for the existence of dislocation of the shoulder, made by placing the hand of the affected side on the opposite shoulder and bringing the elbow to the side of the chest. If this cannot be accomplished (Dugas' sign), dislocation of the shoulder exists.

**Ely's test:** With the patient prone, if flexion of the leg on the thigh causes the buttocks to arch away from the table and the leg to abduct at the hip joint, there is contracture of the lateral fascia of the thigh.

**Fabere sign:** See Patrick's test

**Fadire test:** Forced position of the hip causing pain; the letters stand for Flexion Adduction Internal External Rotation in Extension. Also called Patrick's test, fabere test, figure of 4 test.

**Fajersztajn's crossed sciatic sign:** In sciatica, when the leg is flexed, the hip can also be flexed, but not when the leg is held straight; flexing the sound thigh with the leg held straight causes pain on the affected side. See also contralateral straight leg raising test.

**Fan sign:** Spreading apart of the toes following the stroking of the sole of the foot; it forms part of the Babinski's reflex.

**Femoral nerve stretch test:** For lesion of third or fourth lumbar disk. Passive knee flexion in the prone position causes pain in the back or thighs.

**Femoral nerve traction test:** For radiculopathy of the second through fourth lumbar nerves. With patient prone, the knee is flexed, causing back or thigh pain.

**Finger-nose test:** For coordinated movements of the extremities. With arm extended to one side, the patient is asked to slowly try to touch the end of his nose with the point of his index finger.

**Finkelstein sign:** For synovitis. Bending the thumb into the palm to determine synovitis of the abductor pollicis longus tendon to wrist.

**Fournier test:** The patient is asked to rise on command from a sitting position; he is asked to rise and walk, then stop quickly on command: he is asked to walk and turn around quickly on command. The ataxic gait is thus brought out.

**Fowler maneuver:** A test for tight intrinsic muscles in ulnar deviation of the digits; in rheumatoid arthritis a heavy, taut ulnar band is demonstrated when the digit is held in its normal axial relationship.

**Froment's paper sign:** Flexion of the distal phalanx of the thumb when a sheet of paper is held between the thumb and index finger; seen in affection of the ulnar nerve.

**Gaenslen's sign:** With the patient on his back on the operating table, the knee and hip of one leg are held in flexed position by the patient, while the other leg, hanging over the edge of the table, is pressed down by the examiner to produce hyperextension of the hip; pain occurs on the affected side in lumbosacral disease.

**Galeazzi's sign:** In congenital dislocation of the hip, the dislocated side is shorter when both thighs are flexed 90 degrees.

**Goldthwait's sign:** With the patient lying supine, his leg is raised by the examiner with one hand, the other hand being placed under the patient's lower back. Leverage is then applied to the side of the pelvis. If pain is felt by the patient before the lumbar spine is moved, the lesion is a sprain of the sacroiliac joint. If pain does not appear

until after the lumbar spine moves, the lesion is in the sacroiliac or lumbosacral articulation.

**Gower's sign:** Abrupt intermittent oscillation of the iris under the influence of light; seen in certain stages of tabes dorsalis. Called also Gower's maneuver and Gower's phenomenon.

**Guilland's sign:** Brisk flexion at the hip and knee joint when the contralateral quadriceps muscle is pinched; a sign of meningeal irritation.

**Hamilton's test:** When the shoulder joint is luxated, a rule or straight rod applied to the humerus can be made to touch the outer condyle and acromion at the same time.

**Harris hip scale:** A 100-point scale with 40 points for function and 60 for pain in the hip.

**Heberden's nodules:** Small hard nodules, formed usually at the distal interphalangeal articulations of the fingers, produced by calcific spurs of the articular cartilage and associated with interphalangeal osteoarthritis. Heredity is an important etiologic factor. Called also Heberden's sign.

**Heel-knee test:** For coordinated movements of the extremities. The patient, lying on his back, is asked to touch the knee of one leg with the heel of the other and then to pass the heel slowly down the front of the shin to the ankle.

**Helbing's sign:** Medialward curving of the Achilles tendon as viewed from behind; seen in flatfoot.

**Hirschberg's sign:** Adduction, inversion, and slight plantar flexion of the foot on stroking the inner aspect (not the sole) of the foot from the great toe to the heel. Called also adductor reflex of foot.

**Hoffmann's sign:** 1. Increased mechanical irritability of the sensory nerves in tetany; the ulnar nerve is usually tested. 2. A sudden nipping of the nail of the index, middle, or ring finger produces flexion of the terminal phalanx of the thumb and of the second and third phalanxes of some other finger. Called also digital reflex, Hoffman's reflex, and Trommer's sign.

**Homan's sign:** Discomfort behind the knee on forced dorsiflexion of the foot; a sign of thrombosis in the veins of the calf.

**Hoover's sign:** 1. In the normal state or in genuine paralysis, if the patient, lying on a couch, is directed to press the leg against the couch, there will be a lifting movement seen in the other leg; this phenomenon is absent in hysteria and malingering. 2. Movement of the costal margins towards the midline in inspiration, occurring bilaterally in pulmonary emphysema and unilaterally in conditions causing flattening of the diaphragm, such pleural effusion and pneumothorax.

**Hughston jerk test:** For anterolateral instability of the knee; noted by starting at 45 degrees flexion with tibia internally rotated and applying valgus force while rotating fibula medially. There is a jerk at about 20 degrees from full extension.

**Huntington's sign:** 'The patient is recumbent, with his legs hanging over the edge of the table, and is told to cough. If the coughing produces flexion of the thigh and extension of the leg in the paralyzed limb, it indicates that the paralysis is due to an upper motor neuron lesion.

**Jansen's test:** For osteoarthritis deformans of the hip. The patient is told to cross his legs with a point just above the ankle resting on the opposite knee; this motion is impossible when the disease exists.

**Jendrassik's maneuver:** A procedure for emphasizing the patellar reflex; The patient hooks his hands together by the flexed fingers and pulls apart as hard as he can.

**Kanavel's sign:** A point of maximum tenderness in the palm one inch proximal to the base of the little finger in infection of the tendon sheath.

**Kauffman test:** See pivot-shift sign.

**Keen's sign:** Increased diameter of the leg at the malleoli in Pott's fracture of the fibula.

**Kernig's sign:** In dorsal decubitus, the patient can easily and completely extend the leg; in the sitting position, or when lying with the thigh flexed upon the abdomen, the leg cannot be completely extended it is a sign of meningitis.

**Kerr's sign:** Alteration of the texture of the skin below the somatic level in lesions of the spinal cord.

**Key pinch:** The strength in the ability to grasp, as in holding a key; lateral pinch.

**Kocher maneuver:** For reducing anterior dislocations of the shoulders. Done by abducting the arm, externally rotating adduction, and then internally rotating.

**Lachman test:** With the patient supine and the knee flexed to 20 degrees, the tibia is pulled anteriorly. A "give" reaction or mushy end point indicates a torn anterior cruciate ligament.

**Langoria's sign:** Relaxation of the extensor muscles of the thigh; a symptom of intrascapular fracture of the femur.

**Laseque's sign:** In sciatica, flexion of the hip is painful when the knee is extended, but painless when the knee is flexed. This distinguishes the disorder from disease of the hip joint. See also straight leg raising test.

**Laugier's sign:** A condition in which the styloid process of the radius and of the ulna are on the same level; seen in fracture of the lower part of the radius.

**Leichtenstern's sign:** In cerebrospinal meningitis, lightly tapping any bone of the extremities causes the patient to wince suddenly.

**Leri's sign:** Passive flexion of the hand and wrist of the affected side in hemiplegia shows no normal flexion of the elbow.

**Lhermitte's sign:** The development of sudden transient electric-like shocks spreading down the body when the patient flexes the head forward; seen mainly in multiple sclerosis but also in compression and other disorders of the cervical cord.

**Libman's sign:** Extreme tenderness, but without pain on pressure of the mastoid bones.

**Linder's sign:** With the patient recumbent or sitting with outstretched legs, passive flexion of the head will cause pain in the leg or the lumbar region in sciatica.

**Long tract sign:** Any sign that one would see in affection of either sensory or motor tracts in the spinal cord. For example, Babinski reflex, Romberg test.

**Ludloff's sign:** Swelling and ecchymosis at the base of Scarpa's triangle together with inability to raise the thigh when in a sitting posture, a sign of traumatic separation of the epiphysis of the greater trochanter.

**Mannkopf's sign:** Increase in the frequency of the pulse of pressure over a painful spot; not present in simulated pain.

**McMurray sign:** Occurrence of a cartilage click during manipulation of the knee; indicative of meniscal injury.

**McMurray's test:** For torn meniscus. As the patient lies supine with knee fully flexed, the examiner rotates the patient's foot fully outward and the knee is slowly extended; a painful "click" indicates a tear of the medial meniscus of the knee joint. If the click occurs when the foot is rotated inward, the tear is in the lateral meniscus.

**Mill's test:** For tennis elbow. With the wrist and fingers fully flexed and the forearm pronated, complete extension of the elbow is painful.

**Minor's sign:** The method of rising from a sitting position characteristic of the patient with sciatica: he supports himself on the healthy side, placing one hand on the back, bending the affected leg and balancing the healthy leg.

**Moro reflex:** For testing normal early neurologic development or the failure to progress neurologically. The infant is placed on a table, then the table is forcibly struck from either side, causing the infant's arms to be thrown out as in an embrace; should disappear as infancy progresses.

**Morton sign:** For metatarsalgia or neuroma. Transverse pressure across heads of the metatarsals causes sharp pain in the forefoot.

**Naffziger sign:** For sciatica or herniated nucleus pulposus. Nerve root irritation is produced by external jugular venous compression by examiner.

**Naffziger's test:** For nerve root compression. Increase of aggravation of pain or sensory disturbance over the distribution of the involved nerve root upon manual compression of the jugular veins bilaterally confirms the presence of an extruded intervertebral disk or other mass.

**Ober's test:** The patient lies on the side opposite that to be tested, with the underneath hip and knee flexed; with the upper knee flexed to a right angle the upper hip is flexed to 90 degrees, fully abducted, brought into full hyperextension, and allowed to adduct; the angle that the thigh makes above the horizontal is the degree of abduction contracture.

**Objective sign:** One that can be seen, heard, or felt by the diagnostician. Called also physical sign.

**Ortolani's click:** A click felt when the thigh is abducted in flexion, in congenital dislocation of the hip. It results from the sliding of the femoral head over the acetabular rim. A click can also be felt when the head slips out of the acetabulum on the opposite maneuver. Called also Ortolani's sign.

**Patellar retraction test:** For synovitis. Compression of patella causes pain when the patient attempts to set the quadriceps muscles with the knee in full extension.



**Patrick's test:** With the patient supine, the thigh and knee are flexed and the external malleolus is placed over the patella of the opposite leg; the knee is depressed, and if pain is produced thereby, arthritis of the hip is indicated. Patrick calls this test Fabere sign, from the initial letters of movements that are necessary to elicit it, namely, flexion, abduction, external rotation, extension.

**Payr sign:** Early sign of impending postoperative thrombosis, indicated by tenderness when pressure is placed over the inner side of the foot.

**Peroneal sign:** Dorsal flexion and abduction of the foot, a sign of latent tetany elicited by tapping the peroneal nerve just below the head of the fibula, while the knee is relaxed and slightly flexed.

**Phalen's maneuver:** For detection of carpal tunnel syndrome. The size of the carpal tunnel is reduced by holding the affected hand with the wrist fully flexed or extended for 30 to 60 seconds or by placing a sphygmomanometer cuff on the involved arm and inflating to a point between diastolic and systolic pressure for 30 to 60 seconds.

**Piotrowski's sign:** Percussion of the anterior tibialis muscle produces dorsal flexion and supination of the foot. When this reflex is excessive it indicates organic disease of the central nervous system. Called also anticus sign or reflex.

**Postural fixation:** A sign noted on range of motion of the back; any postural deformity (stiffness) noted does not reverse with range of motion.

**Pseudo-Babinski's sign:** In poliomyelitis the Babinski reflex is modified so that only the big toe is extended, because all foot muscles except dorsiflexors of the big toe are paralyzed.

**Quadriceps test:** For hyperthyroidism. The patient sits well forward on the edge of the normal chair and holds the leg out at a right angle to the body. Normal persons can hold this position for at least a minute; those with hyperthyroidism can maintain it for only a few seconds.

**Queckenstedt's sign:** When the veins in the neck are compressed on one or both sides, there is a rapid rise in the pressure of the cerebrospinal fluid of healthy persons, and this rise quickly disappears when pressure is taken off the neck. But when there is a block in the vertebral canal, the pressure of the cerebrospinal fluid is little or not at all affected by this maneuver.

**Raimiste's sign:** The patient's hand and arm are held upright by the examiner; if the hand is sound, it remains upright on being released; if paretic, the hand flexes abruptly at the wrist.

**Raynaud phenomenon:** Pallor or blueness of fingers, toes or nose brought by exposure to cold and, less commonly, by other stresses.

**Raynaud's sign:** Acrocyanosis (a condition marked by symmetrical cyanosis of the extremities, with persistent, uneven, mottled blue or red discoloration of the skin of the digits, wrists, and ankles and with profuse sweating and coldness of the digits.)

**Rinne test:** A hearing test.

**Romberg test:** For differentiating between peripheral and cerebellar ataxia. An increase in clumsiness in all movements and in the width and uncertainty of the gait when the patient's eyes are closed indicates peripheral ataxia; no change indicates the cerebellar type.

**Romberg's sign:** Swaying of the body or falling when standing with the feet close together and the eyes closed; observed in tabes dorsalis.

**Rust's phenomenon:** In caries or cancer of the upper cervical vertebrae, the patient supports his head with his hands when rising from or assuming a lying position.

**Sarbo's sign:** Analgesia of the peroneal nerve; sometimes noted in tabes dorsalis.

**Schlesinger's sign:** In tetany, if the patient's leg is held at the knee joint and flexed strongly at the hip joint, there will follow within a short time an extensor spasm at the knee joint, with extreme supination of the foot. Called also Pool's phenomenon.

**Simmons test:** See Thompson test.

**Slocum test:** For rotary instability of the knee. The examiner pulls on the upper calf of a supine patient with the knees flexed 90 degrees.

**Somatic sign:** Any sign presented by trunk or limbs rather than sensory apparatus.

**Soto-hall sign:** With the patient flat on his back, on flexion of the spine beginning at the neck and going downward, a pain will be felt at the site of the lesion in back abnormalities.

**Spurling test:** For cervical spine and foraminal nerve encroachment. Compression on the head with extension on the neck causes radicular pain into the upper extremities.

**Straight leg raising (SLR) test:** For determining nerve root irritation. The supine patient elevates his leg straight until there is ipsilateral extremity pain or until the pain is increased with dorsiflexion of the foot. Also called Lasegue sign.

**Strumpell's sign:** 1. Dorsal flexion of the foot when the thigh is drawn up toward the body; seen in spastic paralysis of the lower limb. Called also tibialis sign. 2. Inability to close the fist without marked dorsal extension of the wrist. Called also radialis sign. 3. Pronation sign, passive flexion of the forearm caused by pronation; seen in hemiplegia.

**Strunsky's sign:** A sign for detecting lesions of the anterior arch of the foot. The examiner grasps the toes and flexes them suddenly.

This procedure is painless in the normal foot but causes pain if there is inflammation of the anterior arch.

**Thomas sign:** 1. Flexion of the hip joint can be compensated for by lordosis. 2. Pinching of the trapezius muscle causes goose flesh above the level of a spinal cord lesion.

**Thomas test:** With the patient supine when one leg is flexed so that the knee touches the chest and the lumbar spine is flattened, the angle taken by the other hip is the degree of flexion deformity.

**Thompson test:** Compression of the calf muscle with foot at rest results in ankle flexion if Achilles tendon is intact. Also called Simmons test, Achilles squeeze test.

**Thumb-nail test:** For fractured patella The examiner's thumbnail is passed over the subcutaneous surface of the patella; a fracture will be felt as a sharp crevice.

**Tibialis sign:** Strumpell's sign (def. 1). Also called tibial phenomenon.

**Tinel's sign:** A tingling sensation in the distal end of the limb when percussion is made over the site of a divided nerve. It indicates a partial lesion or the beginning regeneration of the nerve. Called also formication sign and distal tingling on percussion.

**Toe spread sign:** For Morton neuroma. Disproportional spreading of the toes, comparing one foot with the other Also called Nelson sign.

**Tourniquet test:** For phlebitis of the leg. Tourniquet is applied to the thigh and pressure gradually increased until the patient complains of pain in the calf; result is compared with the affect on the opposite leg.

**Trendelenburg's test:** 1. The doctor raises the patient's leg above the level of the heart until the veins are empty, then lowers it quickly. If the veins become distended at once, varicosity and incompetence of the valves are indicated. 2. The patient, standing erect, stripped, with back to the examiner, is told to lift one leg and then the other. When weight is supported by the affected limb, the pelvis on the sound side falls instead of rising; seen in disturbances of the gluteus medius mechanism, as in deformity of femoral neck, dislocated hip joint, and weakness or paralysis of the gluteus medius muscle.

**Trunk rotation:** A test for malingering. Positive when incomplete rotation produces back pain when shoulders and pelvis are passively rotated in the same plane as the patient stands relaxed with the feet together. In the presence of nerve irritation, leg pain may be produced and should be considered as a true medical finding.

**Valsalva's maneuver:** 1. Forcible exhalation effort against closed glottis; the resultant increase in intrathoracic pressure interferes with venous return to the heart. 2. Forcible exhalation effort against occluded nostrils and a closed mouth; the increase pressure in the

eustachian tube and middle ear cause the tympanic membrane to move outward.

**Vanzetti's sign:** In sciatica the pelvis is always horizontal in spite of scoliosis, but in other lesion with scoliosis the pelvis is inclined.

**Waddell's criteria:** A standardized group of five types of physician signs utilized by examiners to detect malingering or pretending:

1. Tenderness that is superficial or does not follow a specific muscle group.
2. Simulation, where the examiner asks a patient to perform a test that has no valid response.
3. Distraction, where the examiner checks that patient's ability while the patient's attention is distracted.
4. Regional disturbances, such as a give way weakness of muscle groups that cannot be explained on a physical basis. Also, sensory losses that do not follow a specific nerve pattern.
5. Overreaction, such as disproportionate verbalization, facial expression, muscle tension and tremor, collapsing or sweating.

**Wartenberg's sign:** 1. A sign of ulnar palsy, consisting of a position of abduction assumed by the little finger. 2. Reduction or absence of the pendulum movements of the arm in walking; seen in patient with cerebellar disease.

**Weber's test:** A hearing test

**Wilson test:** With knee extended from 30 degrees with valgus stress and internal rotation of the foot, a click is heard in cases of osteochondritis dissecans.

**Yergason test:** For subluxation of the long head of the biceps tendon. The elbow is held flexed at 90 degrees with supination and forced external rotation of the shoulder against resistance by the examiner. Painful subluxation of the tendon can be palpated.