Chiropractic Terminology

Abduction: Movement away from the midline.

Acceleration: Rate of change of linear velocity.

Active Movement: Movement accomplished without assistance; the patient moves the joint part unassisted.

Activities of daily living: Daily living activities include but are not limited to: self-care, personal hygiene, communication, normal living postures, ambulation, travel, non-specialized hand activities, sexual function, sleep, social and recreational activities.

Acute:

1. Of recent onset (hours or days)
2. Sharp, poignant; having a short and relatively sever course.

Adduction: Movement towards the midline.

Adhesion: Fibrous band or structures by which parts adhere abnormally.

Adjustment: Specific form of direct arti8cular manipulation (see manipulation) utilizing either long or short leverages techniques with specific contacts, characterized by a dynamic thrust of controlled velocity, amplitude, and direction.

Agonist: Muscles, or portions of muscles, so attached anatomically that when they contract, they develop forces that reinforce each other.

Alignment: To put in a straight line; arrangement of position in a straight line.

Anatomical position:

1. Erect posture, face forward, arms at side, palms and hands forward with fingers ad thumbs in extension.
2. Position of reference for definitions and descriptions of planes and axes.
3. Zero position for measurement of joint motion.

Anecdotal procedure: Includes categories and classifications of procedures, technologies, or equipment that have not received the benefit of the experimental method. Items included in this definition originate and depend upon experiences and observation only.

Angiolipisis: Pressure on an artery, direct or indirect; eg., in the intervertebral foramen through pressure generates by a discopathy, in the foramina transversarii through osteogenic reactions.

Ankylosis: Stiffness or fixation of a joint.

Anomaly: Marked deviation from the normal standard.

Antagonistis muscles: Muscles or portions of muscles so attached anatomically that when they contract they develop forces that oppose each other.

Anterolisthesis:

1. Forward slipping
2. Anterior translation of the vertebral body.

Arthritis: Inflammation of a joint.

Arthrosis: Degenerative joint disease of the diarthrodial (freely movable) joints of the spine or extremities.

Articulation:

1. Place of union or junction between two or more bones of the skeleton.
2. Active of passive process of moving a joint through its entire range of motion.

Associated myofascial trigger point: Focus of hyperirritability in a muscle or its fascia that develops in response to compensatory overload, shortened range, or referred phenomena caused by trigger point activity in another muscle. Satellite or secondary trigger points are types of associated trigger points.

Asymmetry: Lack or absence of symmetry of position or motion. Dissimilarity in corresponding parts or organs on opposite sides of the body which are normally alike (see Tropism).

Atrophy: Acquired reduction in size of an organ that had previously reached a normal size.

Axis: Line around which rotary movement takes place or along which translation occurs. The 3-dimensional description of motion of an object with 3 axes perpendicular to one another.
The right handed Cartesian orthogonal system has 3 axes designated X, Y and Z.

X axis: line passing horizontally from side to side. Moving around the x-axis is said to be in the sagittal plane

Y axis: Line perpendicular to the ground. Movement around y-axis is in the transverse plane.

Z axis: Line passing horizontally front to back. In the coronal plane.

Axoplasmic flow: Flow of neuroplasm along the axon between synapses and toward and away from end organs.

Barrier:

1. Anatomical barrier: Limit of anatomical integrity: the limit of motion imposed by an anatomic structure, Forcing movement beyond this barrier would produce tissue damage.
2. Elastic barrier: elastic resistance that is felt at the end of passive range of movement; further motion towards an anatomi8c barrier may be induced passively.
3. Pathologic barrier: Functional limit within the anatomic range of motion, which abnormally diminishes the normal physiologic range (see fixation).

Biomechanics: Application of mechanical laws to living structures. The study and knowledge or biological function from an application of mechanical principles.

Body Mechanisms: Study of the static and dynamic human body to note the mechanical integration of the parts, and to endeavour to restore and maintain the body as nearly as possible in normal mechanical condition.

Bogginess: Tissue texture abnormality characterised principally by a palpable sense of sponginess in the tissue, interpreted as resulting from congestion due to increased fluid content.

Brachial: Referring to the upper extremity.

Bucket-handle rib motion: Movement of the lower ribs during respiration such that with inhalation the lateral aspect of the rib elevates, increasing the transverse diameter of the thorax.

Bupa: Private health insurance

Caliper rib movement: Movement of lower ribs during respiration such that the ribs move anteriorly with inhalation.

Caudad: towards the tail or inferiorly.

Causalgia: Burning pain that is sometimes present in injuries of the nerve, particularly those sensory nerves supplying the extremities.

Centre of gravity: Point in the body through which the resultant force of gravity acts.

Centre of mass: Point in the body through which all mass seems to be concentrated.

Cephalad: Toward the head.

Cervical: Denoting relation to the neck.

Chiropractor: A chiropractor is a person who practices chiropractic, specialising in the diagnosis, treatment and prevention of disorders of the neuromusculoskeletal system and the effects of these disorders on general health.

Chiropractic: A system of complementary medicine based on the diagnosis and manipulative treatment of misalignments of the joints, especially those of the spinal column, which are believed to cause other disorders by affecting the nerves, muscles, and organs.

Chronic: Long standing but not necessarily incurable. Symptoms may range from mild to severe.

Circumduction of the trunk: Combination of forward flexion, right lateral flexion, extension, and left lateral flexion in succession, which produces a circular movement of the trunk.

Clinical evaluation: Collection of data by a physician for the purpose of determining the health status of an individual. The data include information obtained by history; clinical findings obtained from a physical examination; laboratory tests including radiographs, electrocardiograms, blood tests, and other special tests and diagnostic procedures; and measurements of anthropometric attributes and physiologic and psychophysiologic functions.

Cold laser therapy: is a treatment that utilizes specific wavelengths of light to interact with tissue and help accelerate the healing process.

Compensation: Changes in structural relationships to accommodate foundation disturbances and maintain balance.

Compressive force: Component that acts perpendicular to the mid-plane of the disc

Concussion: Shock, the state of being shaken, a severe shaking or jarring of a part; also the morbid state resulting from such a jarring.

Concomitant: Accompanying; accessory; joined with another.

Contact point: Area of the adjustive hand that makes contact with the patient in the delivery of the chiropractic adjustment (12 contact points)- pisiform, hypothenar, metacarpal, digital, DIP, PIP, MP, web, thumb, thenar, calcaneal and palmar.

Contraction: Physiological development of tension in the muscle.

1. Eccentric: Contraction of a muscle, against resistance while forcing the muscle to lengthen.
2. Concentric: Approximation of the muscle origin and insertion without change in its tension.

Contracture:

1. State of prolonged shortening of a muscle, which persists in the absence of muscle action potential
2. Pathologic shortening of muscle.

Contraindication: Any condition, especially any condition of disease that renders one particular line of treatment improper or undesirable.

Contusion: Bruise, an injury in which the skin is not broken.

Coupling: Phenomenon of consistent association of one motion (translation or rotation) about an axis with another motion (translation or rotation) about a second axis. One motion cannot be produced without the other.

Creep: When deformation of a viscoelastic material over time is subjected to a suddenly applied uniform load.

Crepitus: Crackling sound produced by the rubbing together of fragments of fractured bone.

Curvature: Pathological bend of the spine in the coronal plane.

Curve: Anatomical bend of the spine in the sagittal plane. Primary curves of the spine are the embryological curves that persist in the sacral and thoracic regions. Secondary curves of the spine are developmental and occur in the lumbar and cervical regions as a consequence of the assumption of upright posture.

Decompression: is a surgical procedure that is performed to alleviate pain caused by pinched nerves (neural impingement)

Deformation: Change in length or shape.

Degenerative: Deterioration or breaking down of a part or parts of the body.

Degrees of freedom: Number of independent coordinates required in a coordinated system to completely specify the position of an object in space. One degree of freedom is rotation around one axis or translation along one axis. The spine is considered to have six degrees of freedom because it has the capability of rotary movement around 3 axes as well as translator movement of 3 axes.

Diagnosis: Art of distinguishing one disease from another; the determination of the nature of a cause of disease.

Disability: Legal disqualification or incapacity; something that restricts limitation.

Disc Pain: This condition is characterised by disruption of the internal architecture of the disc in the form of radial fissures extending from the nucleus to the outer annulus. The pathology is confined to the interior of the disc, where the outer remains intact.

Discopathy: Any pathological changes in a disc.

Dislocation: Displacement of one or more bones of a joint or of any organ from the original position.

Displacement: State of being removed from normal position; vertebral displacement refers to a dis-relationship of the vertebra to its relative structures.

Distortion: Any mechanical departure from ideal or normal symmetry in the body framework.

Distraction: Movement of two surfaces away from each other.

Dynamics: Study of motions of bodies and forces acting to produce the motions.

Dyskinesia: Impairment of the power of voluntary movement, resulting in fragmentary or incomplete movements, aberrant motion.

Effleurage: Form of massage employing slow, rhythmic stroking executed with minimum force and light pressure.

Elastic deformation: Any recoverable deformation.

Elasticity: Property of a material or structure to return to its original form following the removal of the deforming load.

Electromyogram: Electrical activity of whole muscles recorded by surface electrodes, or that of single motor units recorded by intramuscular needle electrodes.

End-play (end-feel): Discrete, short range movements of a joint, independent of the action of voluntary muscles, determined by springing each vertebra at the limit of its passive range of motion.

Equilibrium: State in which a body is at rest with neither translatory nor rotatory motion (static equilibrium), or in which a body is in constant motion with no acceleration or deceleration (dynamic equilibrium).

Exacerbation: increase in the manifestations of a malady.

Experimental procedures: Pertaining to, derived from, or found on experiment; tentative. This includes categories and classifications of procedures, technologies, or equipment not conforming to wide-spread use within or amongst individual branches of the health disciplines but nevertheless of such a nature (based on testing and trail criteria) that there is no organised scientific opposition to its use in health care. Although not orthodox, such items are far removes from empiricism or quackery.

Extension: Separation of two embryological ventral surfaces; movement away from the foetal position; the return movement from flexion.

Eukinesia: Good movement.

Facet asymmetry: Vertebral structure in which the orientation of the facets is not automatically bilaterally comparable (see tropism).

Facilitation: Increase in afferent stimuli so that the synaptic threshold is more easily reached; thus there is an increase in the efficiency of subsequent impulses in that pathway or synapse. The consequence of increase efficacy is that continued stimulation produces hyperactive responses.

Fascia: Tissue layers under the skin or between muscles, which form the sheaths of muscles or invest other deep, definitive structures, as nerves and vessels.

Fasciitis: Inflammation of the fascia.

Fibromyalgia syndrome: Form of non-articular rheumatism with diffuse musculoskeletal aches, pain, and stiffness at many sites, associated with exaggerated tenderness at characteristic anatomic locations known as tender points.

Fibrosis: Formation of fibrous tissue.

Fixation:

1. Absence of motion of a joint in a position of motion, usually at the extremity of such motion.
2. (Dynamic fault). State whereby a vertebra or pelvic bone has become temporarily immobilized in a position that it may normally occupy during any phase of physiological spinal movement.
3. Immobilization of a vertebra in a position of movement when the spine is at rest, or in a position of movement when the spine is at rest, or in a position of rest when the spine is in movement.

Fixation subluxation: Lack of movement of a joint, caused by muscular spasm, a shortened ligament, or an intraarticular blocking.

Flat Palpation: Examination by finger pressure that proceeds across the muscle fibres at a right angle to their length, while compressing them against a firm underlying structure, such as bone. It is used to detect taut bands and trigger points.

Flexibility: Ability of a structure to deform under application of load.

Flexion: Approximation of two embryological ventral surfaces; movement toward the foetal position.

Force: In physics, a **force** is any interaction that, when unopposed, will change the motion of an object. In other words, a **force** can cause an object with mass to change its velocity (which includes to begin moving from a state of rest), i.e., to accelerate

Fracture: Breaking of bone or cartilage.

Friction massage: Deep circular massage to irritate or stimulate a muscle or increase its tonus and/or arterial perfusion, or express swelling by moving the skin over the subcutaneous tissue.

Functional: Of or pertaining to a function; affecting the functions but not the structure.

Gait: Manner of walking.

Gliding: Movement in which the joint surfaces are flat or only slightly curved and one articulating surface slides on the other.

Goniometer: Instrument for measuring angles.

Gravitational line: Viewing the patient from the side, an imaginary line in a coronal plane which, in the theoretical ideal posture, starts at the external auditory canal, passes through the lateral head of the humerus at the tip of the shoulder, across the greater trochanter, the lateral condyle of the knee, and slightly anterior to the lateral malleolous.

Gravity line: Action line of force of gravity.

Health:

1. State of optimal physical, mental and social well-being and not merely the absence of disease and infirmity.
2. Adaptive and optimal attainment of physical, mental, emotional and spiritual well-being.

Herniation: Abnormal protrusion of an organ or other body structure through a defect or natural opening.

Homeostasis:

1. Maintenance of static or constant conditions in the internal environment.
2. Level of well-being of an individual maintained by internal physiologic harmony.

Hyper: Beyond excessive.

Hypochondrosis: Chronic condition in which patients are morbidly concerned with their own health, and believe themselves suffering from grave bodily disease.

Hyperextension: Excessive or unnatural movement in the direction of extension.

Hyperkinesia: Too much movement; hypermobility.

Hypermobile joint: Over flexible link in a series of articulated bodies.

Hypo: Under or deficient.

Hypokinesia: Not enough movement; hypomobility.

Iliac crest syndrome: Tenderness over the superomedial aspect of the posterior superior iliac spine.

Iliosacral motion: Motion of the ilia on a transverse axis of the sacrum, as occurs in walking. Considered to be primarily influenced by the attachments and movements of the pelvis, hips and lower extremities.

Immobility: Condition of not being movable.

Impairment: Loss of, loss of use of, or derangement of any body part, system, or function. Permanent impairment is impairment that has become static or well stabilized with or without medical chiropractic treatment, or that is likely to remit despite medical/chiropractic treatment of the impairing condition.

Impinge: To press or encroach upon; to come into close contact; an obstructing lesion causing pressure on a nerve.

Impulse: Integral force of an adjustment with respect to time.

Inflammation: reaction of tissues to injury. The essential process, regardless of causative agent, is characterised clinically by local heat, swelling, redness, and pain; pathologically by primary vasoconstriction, followed by vasodilation with slowing of the blood current, and accumulation and deposition of fibrin.

Inertia: Property that makes a body resist a change in motion.

Inhibition: Effect of one neuron upon another, tending to prevent it from initiating impulses.

Innate: Inborn; hereditary.

Innate intelligence: Intrinsic biological ability of a health organism to react physiologically to the changing conditions of the external and internal environments.

Innervation: Distribution of nerves to a part.

Instability: Quality of condition of being unstable; not firm, fixed or constant. Clinical instability of the spine- loss of the ability of the spine under physiologic loads to maintain relationships between vertebrae in such a way that there is neither damage nor subsequent irritation to the spinal cord or nerve roots, and in addition, there is no development of incapacitating deformities or pain due to structural changes.

Instrumentation: Use of any tool, appliance, or apparatus; work performed with instruments.

Intensity: Grading as follows;

1. Minimal- when the symptoms or signs constitute an annoyance but cause no impairment in the performance of a particular activity.
2. Slight- When the symptoms or signs can be tolerated but cause some impairment in the performance of an activity that precipitates the symptoms or signs.
3. Moderate: When the symptoms and signs cause marked impairment in performance of an activity that precipitates the symptoms or signs.
4. Marked: When the symptoms or signs preclude any activity that precipitates the symptoms or signs.

Intersegmental motion: Relative motion taking place between two adjacent vertebral segments or within a vertebral motion segment. Describes as the upper vertebra moving on the lower.

Intervertebral disk herniation:

1. Protrusion- the annulus is intact but stretched by displaced nuclear material.
2. Extrusion- the annulus is not intact but most of the nuclear material is not herniated beyond the annulus and the posterior longitudinal ligament is intact.
3. Sequestration (prolapse)- The nucleus or a portion there of (free fragment) has herniated entirely beyond the annulus.

Inversion: A turning inward, inside out, upside down, or other reversal of the normal relation of a part. Often used to describe passive inverted traction.

Ischemic compression: Application of progressively stronger painful pressure on a trigger point for the purpose of eliminating the point's tenderness. This action blanches the compressed tissue, which usually becomes hyperemic (flushed) on release of the pressure.

Isokinetic exercise: Exercise using a constant speed of movement of the body part.

Joint Capsule: Consists of a strong outer layer of collagen fibres and an extensible inner layer containing elastic fibres.

Joint dysfunction: Joint mechanics showing area disturbances of function.

Joint play: Discrete, short-range movement of a joint, independent of the action of voluntary muscles, determined by springing each vertebra in the neutral position.

Jump sign: General pain response of a patient, who winces, may cry out, and withdraws in response to pressure applied on a trigger point.

Kinematics: Division of mechanics that deals with the geometry of the motion of bodies, displacement velocity, and acceleration without taking into account the forces that produce the motion.

Kinesiology:

1. Science or study of movement and the active and passive structures involved.
2. Science of movement, its anatomical, physiological, mechanical, psychological, and social aspects.

Kinesthesia: Sense by which muscular motion, weight, position etc. are perceived.

Kinesthetic: Pertaining to kinesthesia.

Kinetic chain: Combination of several successively arranged joints constituting a complex unit, as links in a chain.

1. Closed kinetic chain: a system in which motion of one link has determines relations to every other link in the systems.
2. Open kinetic chain: a combination of links in which the terminal joint is free.

Kinetics: Body of knowledge that deals with the effects of forces that produce or modify body motion.

Kneading: Form of massage employing forceful circular and transverse movement of a large, raised fold of skin and underlying muscles.

Kyphoscoliosis:

1. Abnormal kyphosis plus scoliosis.
2. Backward and lateral curvature of the spinal column.

Kyphosis: Abnormally increase convexity in the curvature of the spine.

Latent myofascial trigger point: Focus of hyper-irritability in a muscle or its fascia that is clinically quiescent with respect to spontaneous pain; it is painful only when palpated. A latent trigger point may have all the other clinical characteristics of an active trigger point, from which it is to be distinguished.

Lateral flexion:

1. Bending to the side away from the midline.
2. Term used to denote lateral movements of the head, neck and trunk in coronal plane. It is usually combines rotation.

Lateral Listhesis: Lateral translator excursion of the vertebral body.

Lever:

1. A rigid bar moving about a fixed joint.
2. Distance between joint centres of body segments.

Ligaments: a short band of tough, flexible fibrous connective tissue which connects two bones or cartilages or holds together a joint.

Link: Distance between joint centres of body segments.

Listing (dynamic): Designation of the abnormal movement characteristics of one vertebra in relation to sub adjacent segments. Dynamic listing nomenclature

1. Flexion restriction
2. Extension restriction
3. Lateral flexion restriction (right or left)
4. Rotational malposition (right or left)

Listing (static): Designation of the spatial orientation of one vertebra in relation to adjacent segments. Static listing nomenclature:

1. Flexion malposition
2. Extension malposition
3. Lateral flexion malposition (right or left)
4. Rotational malposition (right or left)
5. Anterolisthesis
6. Retrolisthesis
7. Lateralisthesis

Lordosis: Exaggerated (or pathological) posterior concavity in the anteroposterior curvature of the lumbar and cervical spine.

Lordotic: Pertaining to or characterised by lordosis, the anterior spinal curve.

Lumbosacral: Pertaining to the lumbar vertebrae and the sacrum; as the lumbosacral plexus, made up of the lower lumbar and upper sacral nerves.

Lumbosacral angle: Inclination of the superior surface of the first sacral vertebra to the horizontal. Usually measured from standing lateral x-ray films.

Maintenance: Regimen designed to provide for the patients continued well-being or to maintain the optimum state of health while minimizing recurrence of the clinical status.

Malingering: To feign illness or disability, usually to secure benefit from an alleged injury.

Malposition: Abnormal or anomalous position.

Manipulation: Passive manoeuvre in which specifically directed manual forces are applied to vertebral and extra vertebral articulations of the body, with the object of restoring mobility to restricted areas.

1. Long-lever manipulation- High velocity force exerted on a point of the body some distance from the area where it is expected to have its beneficial effect.
2. Short-lever manipulation- High velocity thrust directed specifically at an isolated joint.

Manual Therapy: Therapeutic application of manual force. Spinal manual therapy broadly defined includes all procedures in which the hands are used to mobilize, adjust, manipulate, apply traction, massage, stimulate, or otherwise influence the spine and paraspinal tissues with the aim of influencing the patients' health.

Massage: Systematic therapeutic use of friction, stroking and kneading of the body. Manoeuvres performed by hand on the skin of the patients and through the skin of the patient upon the subcutaneous tissue. There may be variation in the intensity of the pressure exerted, the surface area treated and the frequency of application.

Medical necessity: Patients conditions to be treated are recognised ones, and the examinations, tests and treatments are based on scientific studied and principles that are generally accepted by the profession at large as being necessary and appropriate for proper diagnosis and treatment of patients with the3 particular conditions presented.

Meric system: Treatment of visceral conditions through adjustment of vertebrae at levels of neuromeric innervation to the organs involved.

Midheel line: Vertical line used as reference in standing anteroposterior x-rays, passing equidistant between the heels.

Midmalleolar line: Vertical line passing through the lateral malleolus, used as a point of reference in standing lateral x-rays.

Misalignment: Not in proper alignment.

Mobility: Capability of movement or of flowing freely.

Mobilization: Process of making a fixed part movable. A form of manual therapy applied within the physiological passive range of joint motion, characterized by non thrust increase in passive joint play.

Moment of force: Product of force and distance (moment arm) from any point to the action line of force.

Motion:

1. Relative displacement with time of a body in space with respect to other bodies or some reference system.
2. Act or process of changing position. An act of moving the body or its parts.
    - Active motion: movement produced voluntarily by patient.
    - Passive motion: Motion induced by the operator while the patient remains passive or relaxed.
    - Physiologic motion: Normal changes in the position of articulating surfaces taking place within a joint or region.

Motor: That whish causes motion.

Motor Unit: Functional unit of striated muscle comprised of the motor neuron and all the muscle fibres supplies by the neuron.

Muscle: Contractile organ composed of muscle tissue, effecting the movements of organs and parts of the body.

Muscle Spasm: Body's method of protecting injured structures, or protect itself from injury.

Muscle Sprain: Nonspecific tenderness over the muscle.

Myalgia: Pain in a muscle or muscles-

1. Diffusedly aching muscles due to systemic disease such as virus infection.
2. Spot tenderness of a muscle or muscles as in myofascial trigger points.

Myofascial pain syndrome: Pain syndrome characterised by pain in regional muscles accompanied by trigger points that refer pain specifically to each muscle.

Myofascial trigger point: Hyperirritable spot, usually within a taut band of skeletal muscle or in the muscles fascia, that is painful on compression and that can give rise to characteristic referred pain, tenderness and autonomic phenomena.

Myofascitis: Pain, tenderness, other referred phenomena, and the dysfunction attributed to myofascial trigger points.

Myofibrosis: Replacement of muscle tissue by fibrous tissue.

Myotatic unit: A group of agonist and antagonist muscles that function together as a unit because they share common spinal reflex responses.

Nerve interference: Chiropractic term used to refer to the interruption of normal nerve transmission (nerve energy).

Nerve transmission: Transmission of information along a nerve axon.

1. Impulse based- Nerve transmission involving the generation and transfer of electrical potentials along a nerve axon.
2. Non-impulse based- The transfer of chemical messengers along a nerve axon i.e., axoplasmic flow.

Neuralgia: Severe paroxysmal pain along the course of a nerve, not associated with demonstrable structural changes in the nerve.

Neuritis: Lesions of a nerve or nerves, either degenerative or inflammatory, with pain, hypersensitivity, anesthesis or paraesthesia, paralysis, muscular atrophy, and decreased reflexes in the part supplied.

Neurodystrophic: Disease process within a nerve, resulting from trauma, circulation disorders, or metabolic diseases, e.g., a neurodystrophic factor (diabetes and pernicious).

Neurogenic: Often used to mean originating in nerve tissue; “the cause of the disorder is neurogenic.”

Neuropathogenic: Disease within a tissue, resulting from abnormal nerve performance, eg., Barre-Lieou syndrome resulting from neuropathogenic reflexes caused by pathomechanics of the cervical spine.

Neuropathy: General term denoting functional disturbances and/or pathologic changes in the peripheral nervous system.

Neurophysiologic effects: General term denoting functional or aberrant disturbances of the peripheral or the autonomic nervous system. The term is used to designate nonspecific effects related to: (a) motor and sensory functions of the peripheral nervous system; (b) vasomotor activity, secretomotor activity, and motor activity of smooth muscle from the autonomic nervous system, e.g., neck, shoulder, arm syndrome (the extremity becomes cool with increased sweating); (c) trophic activity of both the peripheral and autonomic nervous system, e.g., muscle atrophy in neck, shoulder, arm syndrome.

Neurothlipsis: Direct or indirect pressure on a nerve, e.g., in the IVF through congestion of perineural tissues; in the carpal tunnel through direct ligamentous pressure.

Neurovascular: Pertaining to both nervous and vascular structures.

Nutation: Motion of the sacrum about a coronal axis, in which the sacral base moves anteriorly and inferiorly and the tip of the coccyx moves posteriorly and superiorly; nodding, as of the head.

1. Counter nutation- Motion of the sacrum about a coronal axis in which the sacral base3 moves posteriorly and superiorly and the tip of the coccyx moves anteriorly and inferiorly; nodding, as of the head.

Nucleus Pulposus: is the inner core of the vertebral disc. The core is composed of a jelly-like material that consists of mainly water, as well as a loose network of collagen fibres. The elastic inner structure allows the vertebral disc to withstand forces of compression and torsion.

Objective: Pertaining to those relations and conditions of the body perceived by another, as objective signs of disease.

Orthodox procedures: All categories and classifications of procedures, technologies, or equipment conforming to widespread use within or amongst individual branches of the health disciplines, with such use based in the scientific method.

Osteoarthrosis/ Osteoarthritis: Degenerative bone disease, excruciatingly painful condition caused by a gradual loss of cartilage.

Osteopathy: System of health care founded by Andrew Tyler Still (1828-1917) and based on the theory that the body is capable of making its own remedies against disease and other toxic conditions when it is in a normal structural relationship and has favourable environmental conditions and adequate nutrition. It utilizes generally accepted physical, pharmacological, and surgical methods of diagnosis and therapy, while placing strong emphasis on the importance of body mechanics and manipulative methods to detect and correct faulty structure and function

Osteophyte: Degenerative exostosis secondary to musculotendinous traction.

Pain: Disturbed sensation causing suffering or distress.

Palliative care: Care designed to relieve the symptoms of exacerbation but which results in no net improvement in the patient's stationary condition.

Palpable band (taut band or nodule): Group of taut muscle fibres that is associated with a myofascial trigger point and is identifiable by tactile examination of the muscle. Contraction of fibres in this band produces the local twitch response.

Palpation:

1. Act of feeling with the hands.
2. Application of variable manual pressure through the surface of the body for the purpose of determining the shape, size, consistency, position, inherent motility, and health of the tissues beneath.
3. Motion palpation- Palpatory diagnosis of passive and active segmental joint range of motion.
4. Static palpation- Palpatory diagnosis of somatic structures in a neutral static position.

Palpatory diagnosis: Process of palpating the patient to evaluate the neuromusculoskeletal and visceral systems.

Palpatory skills: Sensory skills used in performing palpatory diagnosis.

Passive motion: Movement that is carried through by the operator without conscious assistance or resistance by the patient.

Passive range of motion: Extent of movement (usually tested in a given plane) of an anatomical part at a joint when movement is produced by an outside force without voluntary assistance of resistance by a subject. The subject must relax the muscles crossing the joint.

Pelvic extension (anterior pelvic tilt): Position of the pelvis in which the vertical plane through the anterior-superior iliac spines is anterior to the vertical plane through the symphysis pubis. It is associated with flexion of the lumbar spine and extension of the hip joints. Pelvic flexion is a rotatory movement of the pelvic ring around the X or coronal axis with the axis passing through the femoral heads.

Pelvic flexion: Position of the pelvis in which the vertical plane through the anterior-superior iliac spines is posterior to a vertical plane through the symphysis pubis. It is associated with flexion of the lumbar spine and extension of the hip joints. Pelvic flexion is a rotatory movement of the pelvis ring around the coronal axis with the axis passing through the femoral heads.

Pelvis lateral shift: Movement in the coronal plane of the pelvis in which one anterior-superior iliac spine moves closer to the midline while the opposite anterior-superior iliac spine has moves further away from the midline. It is associated with adduction and abduction of the hip joints: ie/. In lateral shift of the pelvis to the right, the left anterior-superior iliac spine is closer to the midline, resulting in the right hip in adduction and the left hip is abduction. This motion is coupled with lateral pelvic tilt when the feet are on a level surface. Pelvis lateral shift is a translator movement along the coronal axis, with the axis passing through the femoral heads.

Pelvis lateral tilt: Position of the pelvis un which it is not level in the horizontal plane, ie., one anterior-superior iliac spine is higher than the other. It is associated with lateral flexion of the lumbar spine and adduction and abduction of the hip joints, ie., lateral tilt of the pelvis in which the right side is higher than the left, the lumbar spine is laterally flexed toward the right, resulting in a curve convex to the left with the right hip joint in adduction and the left in abduction. Pelvic lateral tilt is a rotatory movement about the Z or sagittal axis.

Pelvic neutral position: Anterior-superior iliac spines are in the same horizontal plane and in the same vertical plane as the symphysis pubis.

Pelvis rotation: Position of the pelvis in which one anterior-superior iliac spine is anterior to the other. Pelvic rotation is a rotatory movement around the Y or vertical axis.

Percussion: Act of firmly tapping the surface of the body with a finger or small hammer to elicit sounds, or vibratory sensations, for diagnostic value.

Petrissage: Same as kneading.

Physiologic motion: Normal changes in the position of articulating surfaces during the movement of a joint or region.

Pincer palpation: Examination of a part by holding it in a pincer grasp between the tips of the digits, to detect taut bands of fibres, to identify tender points in the muscle, and to elicit local twitch responses.

Plane: Flat surface determined by the position of the three points in space. The three basic planes of reference are derived from the dimensions of space and are at right angles to each other.

1. Sagittal plane- is vertical and extends from front to back, deriving its name from the direction of the sagittal suture of the skull. It may also be called an anterior-posterior plane. The median sagittal plane, midsagittal, divides the body into right and left halves.
2. Coronal frontal plane- is vertical; and extends from side to side, deriving its name from the direction of the coronal suture of the skull. It is also called the frontal or lateral plane, and divides the body into an anterior and a posterior portion.
3. Transverse plane- is horizontal and divides the body into an upper cranial and lower caudal portion.

Plastic deformation: Non-recoverable deformation.

Plasticity: Property of a material to permanently deform when it is loaded beyond its elastic range.

Plumb line: Weighted, true vertical line utilized for visual comparison with the gravitational line.

Postural balance: Condition of optimal distribution of body mass in relation to gravity.

Posture: Optimal posture if that state of muscular and skeletal balance that protects the supporting structures of the body against injury or progressive deformity irrespective of the attitude (erect, lying, squatting, stooping) in which these structures are working or resting.

1. Position of the body.
2. Distribution of body mass in relation to gravity.
3. Attitude of the body.
4. Relative arrangement of the parts of the body.

Preventative: Treatment procedures considered necessary to prevent the development of clinical status.

Primary myofascial trigger point: Hyperirritable spot within a taut skeletal muscle band that was activated by acute or chronic overload (mechanical strain) of the muscle in which it occurs, and was not activated as a result of trigger point activity in another muscle of the body.

Prime mover: Muscle primarily responsible for causing a specific joint action.

Pronation: In relation to the anatomical position, as applied to the hand, the act of turning the hand palmar surface backward (medial rotation). Applied to the foot, a combination of eversion and abduction movements taking place in the tarsal and metatarsal joints, resulting in lowering of the medial margin of the foot.

Prone: Lying with the ventral surface downward.

Proprioception: Sensing the motion and position of the body.

Proprioceptors: Sensory nerve terminals that give information concerning movements and position of the body. They occur chiefly in the muscles, tendons, joints and labyrinths.

Pump-handle rib motion: Movement of the upper ribs with respiration such that during inhalation, the anterior aspect of the rib elevates and causes an increase in the anteroposterior diameter if the thorax.

Range of motion: Range of translation and rotation of a joint for each of its six degrees of freedom.

Reciprocal innervation: Inhibition of antagonistic muscles when the agonist is stimulated.

Rectilinear motion: Motion in a straight line.

Referred autonomic phenomena: Vasoconstriction (blanching), coldness, sweating, pilomotor response, ptosis, and/or hypersecretion that is caused by activity of a trigger point in a region separate from the trigger point. The Phenomena usually appear in the area to which the trigger point refers pain.

Referred trigger point pain: Pain that arises in a trigger point but is felt at a distance, often entirely remote from its source of origin. The distribution of referred trigger point pain rarely coincides with the entire distribution of a peripheral nerve or dermatomal segment.

Referred trigger point phenomena: Sensory and motor phenomena such as pain, tenderness, increased motor unit activity (spasm), vasoconstriction, vasodilation, and hypersecretion caused by a trigger point, which usually occurs at a distance from the trigger point.

Reflex: Result of transforming an ingoing sensory impulse into an outgoing efferent impulse without the act of will.

Reflex therapy: Treatment that is aimed at stimulating afferent neuromuscular receptors.

Rehabilitative: Procedures necessary for re-education or functional restoration of a disabled body system or part.

Relaxation: Decrease in stress in a deformed structure with time when the deformation is held constant.

Resilience: Property of returning to the former shape or size after distortion.

Rib fixation: Movement or position of one or several ribs is altered or disrupted. For example, an elevated rib is one held in a position of inhalation such that motion toward inhalation is freer and motion toward exhalation is restricted. A depressed rib is one held in a position of exhalation such that motion toward exhalation id freer and there is a restriction to inhalation.

Ropiness: Tissue texture abnormality characterised by a cord-like or string-like feeling.

Rotation: Movement about a longitudinal axis.

Sacrum: Large wedge shaped bone comprised of 5 fused sacral vertebrae.

Sacroiliac fixation (sacroiliac joint locking): Absence of normal motion at the sacroiliac joint, demonstrable by motion palpation in which the axis of rotation has shifted to either the superior or inferior portion of the sacroiliac joint, or (rarely) a situation in which there is total joint locking with no axis of rotation.

1. Sacroiliac extension fixation (PI)- A state of the sacroiliac joint in which the posterior-superior iliac spine is fixed in a posterior-inferior position, with the innominate bone on that side fixed in extension In relation to the sacrum. The axis of rotation then shifts superiorly and the inferior joint remains mobile.
2. Sacroiliac flexion fixation (AS)- A state of the sacroiliac joint in which the posterior-superior iliac spine is fixed in an anterior superior position, with the innominate bone on that side fixed in flexion in relation to the sacrum. The axis of rotation then shifts superiorly and the inferior joint remains mobile.

Satellite myofascial trigger point: Focus of hyperirritability in a muscle or its fascia that became active because the muscle was located within the zone of reference of another trigger point. To be distinguished from a secondary trigger point.

Scalar quantity: Quantity having magnitude only, not direction.

Scan: Intermediate screening palpatory examination designed to focus the clinician on regional areas of joint dysfunction.

Scoliosis: Pathological or functional lateral curvature of the spine.

1. Functional scoliosis- Lateral deviation of the spine resulting from poor posture, foundation anomalies, occupational strains, etc., that are still not permanently established.
2. Structural scoliosis- Permanent lateral deviation of the spine such that the spine cannot return to neutral position.

Screening palpation: Digital examination of a muscle to determine the absence or presence of palpable bands and tender trigger points using flat or pincer palpation.

Secondary myofascial trigger point: Hyperirritable spot in a muscle or its fascia that became overactive because its muscle was overloaded as a synergist substituting for, or as an antagonist countering the tautness of the muscle that contained the primary trigger point.

Shear: Applied force that tends to cause an opposite but parallel sliding motion of the planes of an object.

Sherrington laws: Every posterior spinal nerve root supplies a specific region of the skin, although fibres from adjacent spinal segments may invade such a region. When a muscle receives a nerve impulse to contract, its antagonist receives, simultaneously, an impulse to relax.

Short leg: Anatomical, pathological, or functional leg deficiency leading to dysfunction.

Side bending: See lateral flexion.

Somatic dysfunction: Impaired or altered function of related components of the somatic (body framework) systems; skeletal, arthrodial, and myofascial structures and related vascular, lymphatic, and neural elements.

Somatization: Conversion of mental experiences or states into bodily symptoms.

Somatogenic: Produced by activity, reaction, and change originating in the musculoskeletal system.

Spasm: Shortening of a muscle due to nonvoluntary motor nerve activity. Spasm cannot be stopped by voluntary relaxation.

Spinography: Roentgenometrics of the spine.

Spondylitis: Inflammation of the vertebrae.

Spondylarthrosis: Arthrosis of the synovial joints of the spine.

Spondylolisthesis: Anterior displacement of one vertebra over another (usually L5 over the body of the sacrum or L4 over L5).

Spondylolysis: Interruption in the pars interarticularis, may be unilateral or bilateral. Commonly arises as a result of fatigue failure of the pars following repeated flexion or extension, or in twisting movements of the lumbar spine.

Spondylotherapy: Therapeutic application of percussion or concussion over the vertebrae to elicit reflex responses at the levels of neuromeric innervation to the organ being influenced.

Sprain: Joint injury in which some of the fibres of a supporting ligament are ruptures, but the continuity of the ligament remains intact.

Spur: Projection body as from a bone.

Statics: Branch of mechanics that deals with the equilibrium of bodies at rest or in motion with zero acceleration.

Stiffness: Measure of resistance offered to external loads by a specimen o0r structure as it deforms.

Strain:

1. Deformation (lengthening or shortening) of any body part or member.
2. Overstretching and tearing of musculotendinous tissue.

Stress:

1. Internal force between molecules.
2. Sum of the biological reaction to any adverse stimulus- physical, mental and/or emotional, internal or external- that tends to disturb the organism's homeostasis; should these compensating reactions be inadequate or inappropriate, they may lead to disorders.

Stretching: Separation of the origin and insertion of a muscle or attachments of fascia or ligaments by applying constant pressure at a right angle to the fibre of the muscle or fascia.

Stringiness: Palpable tissue texture abnormality characterised by fine or string-like myofascial structures.

Subluxation:

1. Partial or incomplete dislocation.
2. Restriction of motion of a joint in a position exceeding normal physiologic motion, although the anatomic limits have not been exceeded.
3. Aberrant relationships between two adjacent articular structures, which may have functional or pathological sequelae, causing an alteration in the biomechanical and/or neurophysiological reflexes of these articular structures, their proximal structures, and/or body systems that may be directly or indirectly affected by them.

Supination:

1. Beginning in anatomical position, applied to the hand, the action of turning the palm forward (anteriorly) or upward, performed by lateral external rotation of the forearm.
2. Applied to the foot, it generally applies to movements (adduction and inversion) resulting in raising the medial margin of the foot, hence the longitudinal arch.

Supine: Lying with the ventral side upward.

Symmetry: Similarity in corresponding parts or organs on opposite sides of the body.

Syndesmophyte: Osseous excrescence or bony outgrowth from a ligament. Usually projecting vertically in the spine.

Tappotement: Striking the belly of a muscle with the hypothenar edge of the open hand in rapid succession to increase its tone and arterial perfusion.

Technique: Any of a number of physical or mechanical chiropractic procedures used in the treatment of patients.

Tender point: Local areas of hypersensitivity found at consistent anatomic sites, which do not refer pain pressure but produce a pain response to light palpation.

Therapeutic: Any treatment considered necessary to return the patient to a preclinical status or establish a stationary status.

Thrust: Sudden manual application of a controlled directional force upon a suitable part of the patient, the delivery of which effects an adjustment.

Tonus: Slight continuous contraction of muscle, which in skeletal muscles aids in the maintenance of posture and in the return of blood to the heart.

1. Myogenic tonus- Tonic contraction of muscle itself or of its intrinsic nerve cells.

Torque: Moment of force (term generally applied to rotation of shafts).

Torsion: Motion or state where one end of a part is turned about a longitudinal axis while the opposite end is held fast or turned to the opposite direction.

Traction: Force acting on a longitudinal axis to draw structures apart.

Translation: Motion of a rigid body in which a straight line in the body always remains parallel to itself.

Trigger point (myofascial trigger point): Small hypersensitive site that, when stimulated, consistently produces a reflex mechanism that gives rise to referred pain or other manifestations. The response is specific, in a constant reference zone, and consistent from person to person.

Trophic: Of or pertaining to nutrition, especially in the cellular environment.

Tropism: Asymmetry of articular facets.

Vector quantity: Quantity having both magnitude and direction.

Vertebral motion segment: Two adjacent vertebral bodies and the disc between then, the two posterior joints and the ligamentous structures binding the two vertebrae to one another.

Vertebral motor unit: See vertebral motion segment.

Viscoelasticity: Property of a material to show sensitivity to the rate of loading of deformation. Two basic components are viscosity and elasticity.

Viscosity: Property of materials to resist loads that produce shear.

Whiplash: Whip-like action of the cervical spine as the result of sudden acceleration of deceleration of the body. The lower end of the cervical chain acts like the handle of a whip, allowing the remainder of the neck and head to be whipper forward and back or from side to side.