

Glossary

Achalasia (ă-kal-a'-zī-ah). It is a failure to relax, referring especially to visceral openings, such as the pylorus, cardia, or any other sphincter muscles.

Afferent (af'ēr-ent). It means to bring to or into, referring here to the direction of nerve conduction back toward more central structures.

Agglutinin (a-glōō't'n-in). It is an antibody that causes clumping or agglutination of the bacteria or other cells, which either stimulates the formation of the antibody, or contains immunologically similar, reactive material.

Agonist (ag'u-nis't). Denoting a muscle in a state of contraction. Its opposing muscle is the antagonist.

Annulospiral ending (an-u-lō'spī-ral en'din). It is the primary sensory ending occurring in each muscle spindle. It is a rapidly conducting IA afferent fiber that wraps around the center of the nuclear bag fiber and the nuclear chain fiber.

Anosmia (an-os'mi-u). It is a loss of the sense of smell. It may be an essential or true loss, due to lesion of the olfactory nerve; a mechanical or respiratory loss, due to obstruction of the nasal fossae; a reflex loss, due to disease in some other part or organ; or a functional loss, without any apparent causal lesion.

Antagonist (an-tag'u-nist). A muscle that which opposes or resists the action of another muscle, the agonist.

Auscultate (ôs'kul-tāt'). To listen to the sounds made by the thoracic or abdominal viscera as a means of diagnosis.

Avulsion (ă-vul'shun). It is literally defined as a pulling away. When associated with a "sprain", it may refer to the pulling away of a piece of bone by the affected tendon.

Backward retraction (of the shoulder). This term refers to pulling the shoulder back toward the rear, away from the normal resting posture of the shoulder.

Baroreceptors. Sense organs (receptors) that respond to changes in pressure, or pressoreceptors.

Bleb. It is a collection of fluid beneath the skin. Usually the lesions are smaller than bullas or blisters.

Bradycardia (brad'i-kār'di-u). Slowness of the heartbeat, usually defined as a rate under 60 beats per minute.

Brushing. Stimulation of the skin with a paintbrush; it may be motorized.

Bulla (bool'u) (pl. bullae). A bleb; blister; a circumscribed area of separation of the epidermis, due to the presence of clear serum.

Canalized (ku-nal' izd). The formations of canaliculi, or small canals between lesions as occur in some cases of severe acne.

Claudication (klô'di-kā'shun). A condition caused by ischemia of the leg muscles due to sclerosis with narrowing of the arteries of the legs; it is characterized by attacks of lameness and pain, brought on by walking, chiefly in the calf muscles.

Clostridium (klôs-trid'i-um). A genus of bacteria of the family Bacillaceae, containing many species, mostly anaerobic, occasionally microaerophilic, and spore-bearing, formerly of the genus Bacillus. Their usual habitat is the intestinal canal or the soil; some are nonpathogenic, but many are the causal agents of disease in man and the lower animals.

Coliform (co'liform). Resembling the colon bacillus, belonging to the coli-group (a group of allied bacteria).

Cyclooxygenase (si'klo-ozē'-gen-ase). One of the enzymes found in the blood. It is a protein, secreted by the body cells that acts as a catalyst, inducing chemical changes in other substances, itself remaining apparently unchanged in the process.

Decubitus (de-ku'bī-tus) (pl. decubiti). A severe form of bedsore, of neurotrophic origin, most often occurs in paralytic disorders, including hemiplegia, quadriplegia, or paraplegia.

Dermatome (der'matome). The area of skin that is supplied by a single afferent nerve fiber from a single dorsal root; neighboring dermatomes overlap to a considerable extent.

Digastric (dī-gas'trik). Having two bellies; denoting especially a muscle with two fleshy parts separated by an intervening tendinous part.

Dysesthesia (dis-es-the'zī-ah). It is a condition in which there is impairment of sensation but without full anesthesia. It may also be a condition in which ordinary stimuli produce a disagreeable sensation.

Dyspnea (disp-nē'ah). Subjective difficulty or distress in breathing, frequently rapid breathing, usually associated with serious disease of the heart or lungs.

Efferent (ef'ēr-ent). Conducting a nerve impulse outward away from neurological centers.

Enervate (en'ēr-vāt'). To weaken, or cause a failure of, nerve force.

Epistaxis (ep'e-stak'sis). Nosebleed.

Erythema (er'u-thē'mu). It means redness of the skin.

Eschar (es'kär). It is a slough (necrosed tissue separated from the living tissue) following a thermal burn or cauterization of the skin.

Extrafusal (eks-trah-fū'sal) muscle fibers. They comprise the regular contractile units or fibers of the muscle, as opposed to intrafusal muscle fibers or units that make up the muscle spindle.

Fauces (fô'sēz). It is the space between the cavity of the mouth and the pharynx.

Fibrinogenopenia (fi-brin-øj'en-ōpe'nē-ah). It is a concentration of fibrinogen in the blood that is less than the normal.

Fibrous septum (fi'brus sep'tum). A thin wall composed of or containing fibroblasts and the fibrils and fibers of connective tissue formed by such cells, dividing two cavities or masses of softer tissue.

Flower-spray nerve ending. It is the secondary sensory nerve ending occurring in each muscle spindle. It is a group II sensory fiber near the ends of the intrafusal fibers, mainly on the nuclear chain fibers.

Gamma biasing (gam'u bī'usŋ). This term refers to using external stimulation to influence the neuro-activity levels within the gamma loop. In this case, using ice packing to decrease the tendency on the part of the gamma loop to produce muscular contraction, by slowing the efferent impulses to the motor end-plates on the nuclear bag fibers and the nuclear chain fibers that comprise the muscle spindle.

Gasserian ganglion (gasser'ian gan'gli-un). It is a large flattened sensory ganglion of the trigeminal nerve, lying in close relation to the cavernous sinus along the medial part of the middle cranial fossa.

Geniculate ganglion (ju-nik'yoo-lit gan'gli-un). It is the ganglion of the facial nerve.

Hemolysin (hē'mu-li'sin). It is any substance elaborated by a living agent and capable of causing destruction (lysis) of red blood cells and the liberation of their hemoglobin.

Homolateral (homolat'eral). This term is a reference to an occurrence or structure on, or relating to, the same side as another occurrence or structure (see ipsilateral).

Hyaluronidase (hy'aluron'idase). A soluble enzyme product prepared from mammalian testes. Used to increase the effect of local anesthetics and to permit wider infiltration of subcutaneously administered fluids; also, suggested in the treatment of certain forms of arthritis to promote resolution of redundant tissue; to speed the reabsorption of traumatic or postoperative edema and hematoma.

Hyperacusis (hī'pēr-u-kū'sis). Abnormal acuteness of hearing, auditory hyperesthesia, due to increased irritability of the sensory neural mechanism.

Hypertonicity (hypertonic'ity). It is a state of extreme tension of the muscles.

Hypoxia (hi-pok-sē'ah). Less than what is considered the physiologically normal amount of oxygen in the organs and tissues.

Indurate (in'doo-rāt'). A term used to describe soft tissue that has become firm, or extremely firm, but not as hard as bone.

Innervate (l-nūr'vāt). To supply tissues or a body part with nerves.

Internuncial (in-tur-nun'si-al). It is a neuron connecting two other neurons.

Intrafusal (in-trah-fū'sal) muscle fibers. They are the fibers that make up muscle spindles. These fibers are more embryonic in character than extrafusal muscle fibers and have fewer striations. They lie in parallel with the extrafusal muscle fibers, with the ends of their capsules attached to tendons at either end of the muscle or to the sides of adjacent extrafusal muscle fibers.

Ipsilateral (ipsilat'eral). On the same side, especially denoting paralytic or other symptoms occurring on the same side as the brain lesion causing them.

Joint mice. Free floating bodies of calcium within a joint space.

Ligamenta flava (lig'am-en-tum flā'vum). It is one of the ligaments of yellow elastic fibrous tissue, which bind together the laminae of adjoining vertebrae.

Lupus erythematosus. Classified as one of the collagen vascular diseases in which the cutaneous lesions indicate a serious systemic illness. The cutaneous lesions are erythematous, purpuric, urticarial, or erythema multiform-like. The systemic lesions may involve kidneys, endocardium, lungs, joints, etc.

Lysosome (lī'sō-sōm) bodies. These are cytoplasmic particles containing hydrolyzing enzymes, which promote cellular breakdown (putrefaction) when released.

Medullated (med-ul'ā-ted) fibers. Fibers have medullary sheathes.

Meissner's corpuscles (mīs'ners kôr'pus-'ls). Oval masses of wedge-shaped epithelial-like cells, containing the flattened plate-like terminations of one or several axons; they are found chiefly in the papillae of the fingertips and in the conjunctiva.

Melena (mel-e'nah). The passage of dark colored, tarry stools, due to the presence of blood altered by the intestinal juices.

Mortise (môr'tis). Literally, it means a notch, hole, or space cut. Here it refers to a hole that a bone will fit into on another bone.

Myositis ossificans (mi-o-si'tis os-iff'i-cans). It is an ossification or deposit of bone within muscle.

Neoplasm (nē'ō-plaz'm). In a literal sense, any new growth of cells or tissues, but the term is customarily used with rather specific reference to a focus (or a relatively large mass or region) of intermittently or constantly progressive, comparatively unlimited, or uncontrolled new growth that manifests varying degrees of autonomy.

Neuromuscular servo (neu'romuscular sūr'vō) system. Here it refers to the nervous system's ability to maintain neuromuscular tone and joint position through the phasic and tonic stretch reflexes.

Oliguria (oligu'ria). Scanty urination.

Olive. It is one of the myelencephalic (medullary, brain stem) structures. Other such structures include the pyramids, and the roots of seven cranial nerves.

Pacinian corpuscles (pah-che'nē-an kô'rpus-'ls). One of the small oval bodies in the skin, mesentery, tendons, and elsewhere, formed of concentric layers of connective tissue with a soft core in which the axis cylinder of a nerve runs, splitting up into fibrils which terminate in bulbous enlargements. It is sensitive to deep pressure.

Paresthesia (par'es-thē'zhu). It is defined as an abnormal spontaneous sensation, such as of burning, pricking, numbness, etc. In the context of this work the term usually refers to numbness.

Phasic (fās'ik) stretch reflex. Sometimes referred to as the "tendon jerk", a sharp tap of the tendon or muscle belly produce this reflex. This "tap" is shown to produce a synchronous discharge from the primary stretch receptors in the muscle spindle. A monosynaptic pathway conducts the impulse to alpha motor neurons returning to the muscle tapped, and a contraction of the extrafusal fibers results.

Pinna (pin'u). It is the external ear structure exclusive of the meatus. It may also be called the auricle, concha, or auricula.

Pons (ponz). A prominent white mass on the basal aspect of the brain, lying in front of the cerebellum inferiorly, between the medulla and the cerebral peduncles, from each of which it is marked off by a groove; it is convex from side to side anteriorly, and posteriorly it forms part of the floor of the fourth ventricle.

Pseudomonas aeruginosus (su-do-mo'nas aerugino'sus). Bacillus pyocyaneus.

Purpura (pūr'pyoo-ru). A condition characterized by hemorrhage into the skin. The color is first red, becoming gradually darker, then purple, fading to a brownish yellow. It may, in two to three weeks, disappear; it may result in permanent pigmentation.

Pyrexia (pī-rek'si-u). Fever.

Salpingitis (sal-pin-ji'tis). It is an Inflammation of the Fallopian tube.

Septum (sep'tum) (pl. septa). A thin wall which divides two cavities or masses of soft tissue.

Spicule (spik'ūl). A small needle-shaped body usually associated here with calcium deposits.

Stapedius (sta-pe'dī-us). A small muscle in the tympanum inserted into the neck of the stapes.

Stomatitis (stō'mu-t ī'tis). It is an inflammation of the mucous membrane of the mouth.

Stratum corneum (strat'um cor'neum). The outer layer of the epidermis, consisting of several layers of flat keratinized non-nucleated cells.

Stroma (strō'mu). The framework, usually of connective tissue, of an organ, gland, or other structure; distinguished from the parenchyma, or specific substance, of the part.

Supratrochlear foramen (su-prah-trok'le-ar fō-rā'mun). An aperture found just above the trochlea of the elbow.

Syncope (sin'ku-pi). A sudden fall of blood pressure or failure of the cardiac systole, resulting in cerebral anemia and a complete loss of consciousness.

Syndesmosis (sin'des-mō'sis). A synarthrosis in which opposing surfaces are united by fibrous connective tissue; as the union between the lower ends of the tibia and fibula.

Tetanus (tet'u-nus). A sustained muscular contraction caused by a series of stimuli repeated so rapidly that the individual muscular responses are fused. Motor impulses reaching intact muscles in the body at such a high rate usually produce a **tetanic** contraction.

Tetany (tet'u-ni). A maximum sustained muscular contraction.

Tonic stretch reflex. It is Sometimes called the postural reflex. A maintained stretch of the muscle produces an asynchronous stream of afferent impulses from the primary stretch receptors of the muscle spindle. These afferent impulses are synapsed with the alpha motor neurons returning to the muscle stretched. A maintained contraction in that muscle is produced. Evidence indicates that this reflex is polysynaptic and causes reciprocal inhibition of the antagonists of the muscle stretched.

Translatory (trans-la'tōrē'). Causing a change from one position to another.

Triangular arcuate (trī-an'gyoo-lēr är'kū-āt') ligament. It is one of the component ligaments that make up the ulnar channel in the elbow, through which the ulnar nerve travels on its way to the hand.

Tropocollagen (tropocol'lagen). The basic collagen molecule consisting of three helically arranged polypeptid chains, one of which differs in amino acid composition.

Turgidity (tēr-jid'u-ti). It is a swollen or congested condition of the soft tissues.

Urticaria (ūr'tu-kâr'i-u). Another term for hives, described as an eruption of itching wheals usually of systemic origin. It may be due to a state of hypersensitivity to foods or drugs, foci of infection, or psychological stimuli.

Venturi (ven'too-rē) effect. When a tube is narrowed, the effects on the fluid passing through the tube, if under pressure, include a decrease in the volume of fluid leaving the far end of the narrowed segment of the tube while simultaneously increasing the speed of its departure, when compared to that of the fluid just before entering the narrowed segment.

Vesicle (ves'i-k'l). A small circumscribed elevation on the skin, containing serum.