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(lərf'grənʒ) [vɪnmɛɪm Löffler, Swiss physician, 1887-1972] see under *endocarditis* and *syndrome*.

Löf-gren's syndrome (lərf'grənʒ) [Sven Halvar Löffgren, Swedish physician, 20th century] see under *syndrome*.

log-a-dec-to-my (log'ə-dek'tə-mē) [Gr. *logades* the whites of the eyes + *-ectomy*] excision of a portion of the conjunctiva.

log-a-graph-ia (log'ə-graf'e-ə) [*log-* + *agraphia*] agraphia.

log-am-ne-sia (log'am-ne'zhə) [*log-* + *amnesia*] 1. receptive aphasia. 2. any condition in which a person cannot remember words.

log-a-pha-sia (log'ə-fa'zhə) [*log-* + *aphasia*] motor aphasia.

log-a-rithm (log'ə-rith-əm) the power to which a number, fixed for a given system and usually called the base number, must be raised to obtain a second number. Logarithms are usually computed in the natural base *e*, and are denoted \log_e (also expressed \ln). For example, if $\log_e(y) = x$ then $e^x = y$. See also *e*.

loge (lōzh) [Fr.] a hut, box, or booth.

l. de Guyon Guyon's canal.

log(o)- [Gr. *logos* word, reason] a combining form denoting relationship to words or speech.

logo-clo-nia (log'o-klo'ne-ə) [*logo-* + *clonus* + *-ia*] spasmodic repetition of words or parts of words, particularly the end syllables, often occurring in Alzheimer's disease. Cf. *stuttering* (def. 1). Called also *logospasm*.

logo-gram (log'o-gram) the graphic record of the symptoms and signs exhibited by a specific patient, charted by means of the logoscope.

logo-klony (log'o-klon'e) logoclonia.

logo-ma-nia (log'o-ma'ne-ə) [*logo-* + *-mania*] logorrhea.

log-op-a-thy (log-op'ə-the) [*logo-* + *-pathy*] speech disorder.

logo-pe-dia (log'o-pe'de-ə) logopedics.

logo-pe-dics (log-o-pe'diks) [*logo-* + *orthopedics*] the study and treatment of speech defects. See also *speech pathology*, under *pathology*. Called also *logopedia*.

logo-ple-gia (log'o-ple'jə) [*logo-* + *-plegia*] paralysis of the speech organs.

log-or-rhea (log'o-re'ə) [*logo-* + *-rrhea*] excessive volubility, with rapid, pressured speech; as seen in manic episodes of bipolar disorder and in some types of schizophrenia. Called also *agitallia*, *agitophasia*, *pressured speech*, *tachylalia*, *tachyphasia*, and *verbomania*.

logo-spasm (log'o-spaz-əm) 1. logoclonia. 2. stuttering (def. 1).

log-wood (log'wood) *Haematoxylon campechianum*.

-logy [Gr. *logos* word, reason] a word termination meaning the science or study of, or a treatise on, the subject designated by the stem to which it is affixed.

Löh-lein-Baehr lesion (lərlin bār) [Max Hermann Friedrich Löhlein, German physician, 1877-1921; George Baehr, American physician, 1887-1978] see under *lesion*.

lo-i-a-sis (lo-i'ə-sis) infection with nematodes of the genus *Loa*; called also *loiasis*.

loin (loin) lumbus.

Lo-li-um (lo'le-əm) the rye grasses, a genus of plants commonly found in pastures and consumed by livestock.

L. peren'ne perennial rye grass, a variety that sometimes carries the fungus *Acremonium loliae*, which causes a type of rye grass staggers in ruminants. See *rye grass staggers* (def. 2), under *staggers*.

L. ri'gidum Wimmera rye grass, a variety whose seed galls sometimes carry nematodes infected with species of *Corynebacterium*, causing a type of rye grass staggers in ruminants. See *rye grass staggers* (def. 1), under *staggers*.

L. temulen'tum L. (Gram.), darnel, a rye grass whose seeds contain a narcotic; poisoning of humans and other animals can occur when they ingest moldy seeds. See *darnel poisoning*, under *poisoning*.

lo-me-flox-a-cin (lo'mə-flok'sə-sin) a fluoroquinolone antibacterial effective against a wide range of aerobic gram-negative and gram-positive organisms.

l. hydrochloride the hydrochloride salt of lomefloxacin, administered orally in the treatment of bronchitis and the treatment and prevention of urinary tract infections.

lo-mo-some (lo'mo-sōm) [Gr. *lōma* hem, fringe + *-some*] a spongelike structure in fungi contiguous with the hyphal wall.

Lo-mo-til (lo'mo-til) trademark for combination preparations of diphenoxylate hydrochloride and atropine sulfate.

urea (q.v.) group, used as an antineoplastic primarily for treatment of brain tumors and Hodgkin's disease; administered orally. Called also *CCNU*.

Lon-cho-car-pus (lon'ko-kahr'pəs) a genus of tropical American woody plants of the family Leguminosae. *L. utilis* is the cubé, which yields the toxic insecticide rotenone.

long-chain-fat-ty-ac-id-CoA li-gase (long chān fat'e as'id ko-a' li'gās) [EC 6.2.1.3] an enzyme of the ligase class that catalyzes the formation of acyl coenzyme A from long chain fatty acids (12 or more carbons) and coenzyme A, using energy derived from ATP hydrolysis. The enzyme occurs in the mitochondrial outer membrane, endoplasmic reticulum, and peroxisome membrane, and it acts on saturated and unsaturated fatty acids as well as some hydroxy acids. Called also *acyl CoA synthetase*.

lon-gev-i-ty (lon-jev'i-te) [L. *longus* long + *aeuum* age] the condition or quality of being long lived.

lon-gi-lin-e-al (lon'ji-lin'e-əl) built along long, narrow lines; dolichomorphic.

lon-gi-man-ous (lon'ji-man'əs) [*longus* + *manus*] having long hands.

lon-gi-pe-date (lon'ji-pe'dāt) [*longus* + *ped*⁻² + *-ate*] having long feet.

lon-gis-si-mus (lon-jis'i-məs) [L. "longest, very long"] a general term denoting a long structure, as a muscle.

lon-gi-tu-di-nal (lon'ji-too'di-nəl) [L. *longitudo* length] lengthwise; parallel to the long axis of the body or an organ.

lon-gi-tu-di-na-lis (lon'ji-too'di-na'lis) [L.] [TA] lengthwise; a term denoting a structure that is parallel to the long axis of the body or an organ.

lon-gi-typ-i-cal (lon'ji-tip'i-kəl) longilineal; dolichomorphic.

long-sight-ed-ness (long-sīt'əd-nəs) hyperopia.

lon-gus (long'gəs) [L.] [TA] long; a general term denoting a long structure, as a muscle.

Loni-ten (lon'i-ten) trademark for a preparation of minoxidil.

Lo-nox (lo'noks) trademark for combination preparations of diphenoxylate hydrochloride and atropine sulfate.

loop (lōop) 1. a turn or sharp curve in a cordlike structure; see also *ansa*. 2. something, such as a figure or course, having such a curved or circular shape. 3. an instrument used in microbiology, consisting of a rod-shaped metal handle holding a firm wire of platinum or nichrome, whose free end is formed into a ring that usually has an inside diameter of 4 mm. It is used for the inoculation of cultures of bacteria and fungi.

amplification l. in positive feedback, the loop through which increased output subsequently increases input and so increases output.

bulboventricular l. ventricular l.

capillary l's minute endothelial tubes that carry blood in the papillae of the skin.

cervical l. peripheral cuboidal cells of the enamel organ that encircle the edge of a developing tooth.

closed l. a type of feedback in which the input to one or more of the subsystems is affected by its own output.

feedback l. the circular path seen in a system that has feedback, such that the output of the system participates in the control of the system.

gamma l. a three-part reflex arc consisting of gamma motoneurons that send impulses along the gamma fibers to the intrafusal fibers, causing the muscle spindle to contract; that in turn excites afferent impulses, which pass through the posterior root to alpha motoneurons in the anterior horn, causing a stretch reflex. Called also *Granit l.*

Gerdy's interatrial l. a small muscular bundle in the interatrial septum of the heart.

Granit l. gamma l.

l. of Henle, Henle's l. ansa nephroni.

l. of hypoglossal nerve ansa cervicalis.

Hyrtl's l. an occasional looplike anastomosis between the right and left hypoglossal nerves in the genioid muscle.

Ivy l. see under *wiring*.

lenticular l. ansa lenticularis.

Meyer's l., Meyer-Archambault l. one formed by some of the fibers of the optic radiation as they loop around the inferior horn of the lateral ventricle before turning posteriorly.

open l. a system in which an input alters the output, but the output has no effect on the input. See also *feedback*.

peduncular l. ansa peduncularis.

pressure-volume l's graphic representations of the pressure within cardiac ventricles as a function of their volumes, recorded over the course of the cardiac cycle under various conditions, such as increased preload or afterload, and used to assess cardiac contractility.

sentinel l. a distended loop of small intestine near the pancreas seen on plain films of the abdomen in acute pancreatitis.

been given following stroke or head trauma and for the treatment of mental changes in the elderly.

me-co-bal-amine (me''ko-bal'ā-mēn) a naturally occurring hemopoietic vitamin found in the blood, closely related to cyanocobalamin, in which the cyano radical has been replaced by a methyl radical.

me-co-ce-phal-ic (me''ko-sə-fal'ik) [Gr. *mēkos* length + *cephalic*] dolichocephalic.

me-co-nate (mek'o-nāt) [Gr. *mēkōn* poppy + *-ate*] any salt of meconic acid.

me-con-ic ac-id (mā-kon'ik) an acid occurring in opium that forms soluble salts with the opiates.

me-co-ni-or-rhea (mā-kō'ne-o-re'ə) [*meconium* + *-rrhea*] excessive discharge of meconium.

me-co-ni-um (mā-kō'ne-əm) [L., from Gr. *mēkōnion*] a dark green mucilaginous material in the intestine of the full-term fetus, being a mixture of the secretions of the liver, intestinal glands, and some amniotic fluid.

me-cryl-ate (mā-kril'āt) a type of cyanoacrylate adhesive used in surgery.

me-cys-ta-sis (mā-sis'tā-sis) [Gr. *mēkynein* to lengthen + *stasis*] a state in which a muscle fiber is relatively increased in length, resists stretch, contracts, and relaxes, and manifests the same tension as before elongation.

MED minimal effective dose; minimal erythema dose.

Med-a-war (med'ə-war) Peter Brian, 1915–1987. Brazilian-born British biologist; co-winner, with Sir Frank M. Burnet, of the Nobel prize for medicine or physiology in 1960 for the discovery of the mechanism of acquired immunological tolerance.

Med-ex (med'eks) [Fr. *médecin* extension of the physician] a program that recruits former military medics for training and practice as physician assistants; abbreviated Mx.

me-dia (me'de-ə) [L.] 1. plural of *medium*. 2. middle. 3. tunica media vasorum.

me-di-ad (me'de-əd) [*medium* + *-ad*¹] toward a median line or plane.

me-di-al (me'de-əl) [L. *medialis*] 1. pertaining to the middle; closer to the median plane or the midline of a body or structure. 2. pertaining to the middle layer of structures.

me-di-a-lec-i-thal (me'de-ə-les'ī-thəl) [*media-* + *-lecthal*] having a medium amount of yolk; see under *ovum*.

me-di-a-lis (me'de-ə'lis) [TA] medial; a general term denoting a structure situated nearer to the median plane or the midline of a body or structure.

me-di-an (me'de-ən) [L. *medianus*] 1. situated in the median plane or in the midline of a body or structure. 2. any value that divides the probability distribution of a random variable in half, i.e., the probability of observing a value above the median and the probability of observing a value below the median are both less than or equal to one half. For a finite population or sample, the median is the middle value of an odd number of values (arranged in ascending order) or any value between the two middle values of an even number of values; in the latter case it is conventional to use the average of the two middle values. Symbol *m*.

me-di-a-nus (me'de-ə'nəs) [L.] [TA] median, or situated in the middle; a general term denoting structures lying in the median plane.

me-di-a-om-e-ter (me'de-ə-om'ə-tər) [*media* + *-meter*] an instrument for detecting and measuring refractive errors of the dioptric media.

me-di-as-ti-na (me'de-əs-tī'nā) [L.] plural of *mediastinum*.

me-di-as-ti-nal (me'de-əs-tī'nəl) [L. *mediastinalis*] of or pertaining to the mediastinum.

me-di-as-ti-ni-tis (me'de-əs'tī-ni'tis) inflammation of the mediastinum.

acute m. an often fatal inflammation of the mediastinum, with sudden onset of chills, fever, and prostration. Other symptoms are severe chest pain and sometimes tachypnea, tachycardia, pneumomediastinum, and hemomediastinum. It is usually secondary to perforation of the esophagus by forceful vomiting or trauma; less often it may be caused by spread of an infectious process from some adjacent organ or area. There may be obstruction of structures in the area, such as the superior vena cava or the tracheobronchial tree.

chronic m. any of numerous inflammatory conditions of the mediastinum, often secondary to a fungal or tuberculous infection; symptoms may be minimal or the result of obstruction of structures in the area. The most common specific condition is mediastinal fibrosis.

fibrosing m., fibrous m. mediastinal fibrosis.

granulomatous m. mediastinal fibrosis with granulomas.

indurative m. mediastinal fibrosis.

me-di-as-ti-nog-ram (me'de-əs-tī-nō-grām) a radiograph of the mediastinum.

me-di-as-ti-nog-ra-phy (me'de-əs'tī-nō-grə-fe) radiography of the mediastinum.

me-di-as-ti-no-peri-car-di-tis (me'de-əs'tī-nō-per'e-kahr-di'tis) adhesive pericarditis in which the adhesions extend from the pericardium to the mediastinum. See also *adhesive pericarditis*, under *pericarditis*.

adhesive m. mediastinopericarditis.

me-di-a-sti-no-scope (me'de-ə-stī'nō-skōp) a specially designed endoscope used in mediastinoscopy.

me-di-as-ti-no-scop-ic (me'de-əs'tī-nō-skop'ik) pertaining to the mediastinoscope or to mediastinoscopy.

me-di-as-ti-nos-co-py (me'de-əs'tī-nōskə-pe) examination of the mediastinum by means of an endoscope inserted through an anterior incision in the suprasternal notch, permitting direct inspection and biopsy of tissue in the anterior superior mediastinum.

me-di-as-ti-not-o-my (me'de-əs'tī-not'ə-me) [*mediastinum* + *-tomy*] the operation of cutting into the mediastinum. Performed from the front, it is *anterior* or *cervical mediastinotomy*; from the back, *posterior* or *dorsal mediastinotomy*.

me-di-as-ti-num (me'de-əs-tī'nəm) pl. *mediasti'na* [L.] 1. a median septum or partition. 2. [TA] the mass of tissues and organs separating the two pleural sacs, between the sternum anteriorly and the vertebral column posteriorly and from the thoracic inlet superiorly to the diaphragm inferiorly. It contains the heart and pericardium, the bases of the great vessels, the trachea and bronchi, esophagus, thymus, lymph nodes, thoracic duct, phrenic and vagus nerves, and other structures and tissues. The mediastinum is divided into a superior region and an inferior region that comprises anterior, middle, and posterior parts.

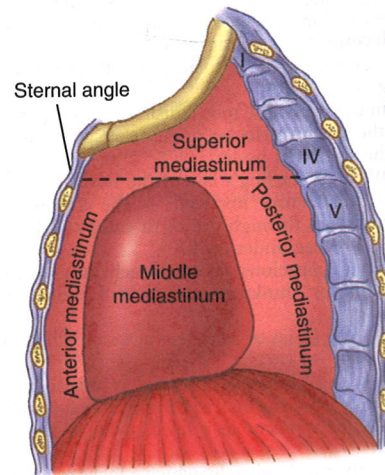
m. ante'rius [TA] anterior mediastinum: the division of the mediastinum bounded posteriorly by the pericardium, anteriorly by the sternum, and on each side by the pleura. It contains loose areolar tissue and lymphatic vessels. Called also *anterior mediastinal cavity*.

m. infe'rius [TA] inferior mediastinum: the three inferior portions of the mediastinum, comprising the *m. anterior*, *m. medium*, and *m. posterior*; see also *mediastinum* (def. 2).

m. me'dium [TA] middle mediastinum: the division of the mediastinum containing the heart enclosed in its pericardium, the ascending aorta, the superior vena cava, the bifurcation of the trachea into bronchi, the pulmonary arteries and veins, the phrenic nerves, a large portion of the roots of the lungs, and the arch of the azygos vein. Called also *middle mediastinal cavity*.

m. poste'rius [TA] posterior mediastinum: the division of the mediastinum bounded posteriorly by the vertebral column, anteriorly by the pericardium, and on each side by the pleurae. It contains the descending aorta, parts of the greater and lesser azygos and superior intercostal veins, the thoracic duct, the esophagus, the vagus nerves, and the greater splanchnic nerves. Called also *posterior mediastinal cavity*.

m. supe'rius [TA] superior mediastinum: the division of the mediastinum extending from the pericardium to the root of the neck, and containing the esophagus and the trachea posteriorly, the thymus or its remains anteriorly, and the great vessels related to the heart and pericardium, the thoracic duct, and the vagus nerves in between. Called also *superior mediastinal cavity*.



■ Subdivisions of the mediastinum.