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**actinic k.**, a reaction of the cornea to ultraviolet light.

**deep punctate k.**, sharply defined opacities in an otherwise clear cornea, occurring in syphilitic iritis.

**dendriform k.**, **dendritic k.**, a form of herpetic k.

**diffuse deep k.**, SYN *k. profunda*.

**Dimmer k.**, SYN *k. nummularis*.

**disciform k.**, large disk-shaped infiltration of the central or para-central corneal stroma. This lesion is deep and nonsuppurative and is seen in virus infections, particularly herpetic. SYN *k. disciformis*.

**k. discifor'mis**, SYN *disciform k.*

**exposure k.**, inflammation of the cornea resulting from irritation caused by inability to close the eyelids. SYN *lagophthalmic k.*

**fascicular k.**, a phlyctenular k. followed by the formation of a band or fascicle of blood vessels extending from the margin toward the center.

**filamentary k.**, a condition characterized by the formation of epithelial filaments of varying size and length on the corneal surface. SYN *k. filamentosa*.

**k. filamento'sa**, SYN *filamentary k.*

**geographic k.**, k. with coalescence of superficial lesions in herpes keratitis.

**herpetic k.**, inflammation of the cornea (or cornea and conjunctiva) due to herpes simplex virus. SYN *herpes corneae*, *herpetic keratoconjunctivitis*.

**interstitial k.**, an inflammation of the corneal stroma, often with neovascularization.

**lagophthalmic k.**, SYN *exposure k.*

**k. linea'ris mi'grans**, a deep, linear corneal opacity stretching from limbus to limbus; associated with congenital syphilis.

**marginal k.**, a corneal inflammation at the limbus.

**metaherpetic k.**, a postinfectious corneal inflammation in herpetic k. leading to epithelial erosion; not due to virus replication.

**mycotic k.**, an infection of the cornea of the eye caused by a fungus.

**necrotizing k.**, severe inflammation and destruction of corneal tissue that may be seen in response to herpes infection.

**neuroparalytic k.**, SYN *neurotrophic k.*

**neurotrophic k.**, inflammation of the cornea after corneal anesthesia. SYN *neuroparalytic k.*

**k. nummula'ris**, coin-shaped or round, discrete, grayish areas 0.5 to 1.5 mm in diameter scattered throughout the various layers of the cornea. SYN *Dimmer k.*

**phlyctenular k.**, an inflammation of the corneal conjunctiva with the formation of small red nodules of lymphoid tissue (*phlyctenulae*) near the corneoscleral limbus. SYN *scrofulous k.*

**pneumococcal/suppurative k.**, SYN *serpiginous k.*

**polymorphic superficial k.**, epithelial degeneration occurring in starvation.

**k. profun'da**, an inflammation of the posterior corneal stroma. SYN *diffuse deep k.*

**punctate k.**, **k. puncta'ta**, SYN *keratic precipitates*, under *precipitate*.

**sclerosing k.**, inflammation of the cornea complicating scleritis; characterized by opacification of the corneal stroma.

**scrofulous k.**, SYN *phlyctenular k.*

**serpiginous k.**, a severe, creeping, central, suppurative ulcer often due to pneumococci. SYN *pneumococcal/suppurative k.*, *serpent ulcer of cornea*.

**k. sic'ca**, SYN *keratoconjunctivitis sicca*.

**superficial linear k.**, spontaneous, painful k. with epithelial erosion and folds in Bowman membrane.

**superficial punctate k.**, epithelial punctate k. associated with viral conjunctivitis. SYN *Thygeson disease*.

**trachomatous k.**, SEE *pannus*, corneal *pannus*.

**vascular k.**, superficial cellular infiltration of the cornea and neovascularization between Bowman membrane and the epithelium.

**vesicular k.**, k. with coalescence of areas of epithelial corneal edema.

**xerotic k.**, SYN *keratomalacia*.

✠ **kerato-, kerat-**. 1. The cornea. 2. Horny tissue or cells. SEE ALSO *cerat-, cerato-*. [G. *keras*, horn]

✠ **ker-a-to-ac-an-tho-ma** (ker'ă-tō-ak'an-thō'mă). A rapidly growing tumor that may be umbilicated, and usually occurs on exposed areas of the skin in elderly white men, which invades the dermis but remains localized and usually resolves spontaneously if untreated; microscopically, the nodule is composed of well-differentiated squamous epithelium with a central keratin mass that opens on the skin surface. [kerato- + G. *akantha*, thorn, +-oma, tumor]

**ker-a-to-an-gi-o-ma** (ker'ă-tō-an-jē-ō'mă). SYN *angiokeratoma*.

**ker-a-to-cele** (ker'ă-tō-sēl). Hernia of Descemet membrane through a defect in the outer layers of the cornea. [kerato- + G. *kēlē*, hernia]

**ker-a-to-con-junc-ti-vi-tis** (ker'ă-tō-kon-jūngk'ti-vī'tis). Inflammation of the conjunctiva and of the cornea.

**atopic k.**, a chronic papillary inflammation, of the conjunctiva showing Trantas dots in a patient with a history of atopy.

**epidemic k.**, follicular conjunctivitis followed by subepithelial corneal infiltrates; often caused by adenovirus type 8, less commonly by other types. SYN *virus k.*

**flash k.**, SYN *ultraviolet k.*

**herpetic k.**, SYN *herpetic keratitis*.

**microsporidian k.**, a form of k. often associated with immunosuppressed persons, such as those suffering from AIDS.

**k. sic'ca**, k. associated with decreased tears. SEE ALSO *Sjögren syndrome*. SYN *dry eye syndrome*, *keratitis sicca*.

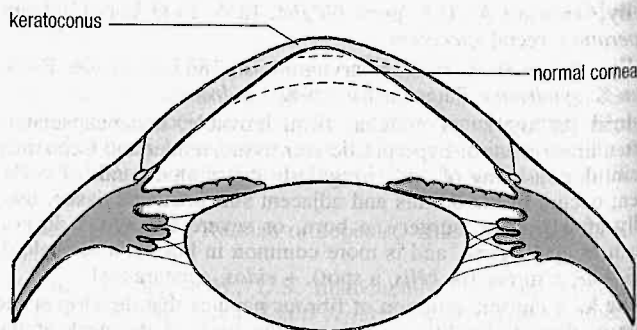
**superior limbic k.**, inflammatory edema of the superior corneoscleral limbus.

**ultraviolet k.**, acute k. resulting from exposure to intense ultraviolet irradiation. SYN *actinic conjunctivitis*, *arc-flash conjunctivitis*, *flash k.*, *ophthalmia nivalis*, *snow conjunctivitis*, *welder's conjunctivitis*.

**vernal k.**, SYN *vernal conjunctivitis*.

**virus k.**, SYN *epidemic k.*

✠ **ker-a-to-co-nus** (ker'ă-tō-kō'nūs). A conical protrusion of the cornea caused by thinning of the stroma; usually bilateral. SEE ALSO *Fleischer ring*, *Munson sign*. SYN *conical cornea*. [kerato- + G. *kōnos*, cone]



keratoconus

**circumscribed posterior k.**, congenital corneal defect characterized by a craterlike defect on the posterior corneal surface.

**ker-a-to-cri-coid** (ker'ă-tō-krī'koyd). SYN *ceratocricoid*.

**ker-a-to-cyst** (ker'ă-tō-sist). Odontogenic cyst derived from remnants of the dental lamina and appearing as a unilocular or multilocular radiolucency which may produce jaw expansion; epithelial lining is characterized microscopically by a uniform thickness, a corrugated superficial layer of parakeratin, and a prominent basal layer composed of palisaded columnar cells; associated with the bifid rib basal cell nevus syndrome.

**odontogenic k.** (ke-ră'tō-sist), a cyst of dental lamina origin with a high recurrence rate and well-defined histologic criteria of a corrugated parakeratin surface, uniformly thin epithelium, and a palisaded basal layer. One manifestation of the basal cell nevus syndrome.

**pal-i-ki-ne-sia, pal-i-ci-ne-sia** (pal-i-ki-nē'zē-ā, -si-nē'zē-ā). Involuntary repetition of movements. [G. *palin*, again, + *kinēsis*, movement]

**pal-i-nal** (pal'i-nāl). Moving backward. [G. *palin*, backward]

**pal-in-drome** (pal'in-drōm). In molecular biology, a self-complementary nucleic acid sequence; a sequence identical to its complementary strand, if both are "read" in the same 5' to 3' direction, or inverted repeating sequences running in opposite directions (e.g., 5'-AGT-TGA-3') on either side of an axis of symmetry; p.'s occur at sites of important reactions (e.g., binding sites, sites cleaved by restriction enzymes); imperfect p.'s exist, as do interrupted p.'s that allow the formation of loops. [G. *palindromos*, a running back]

**pal-in-dro-mia** (pal-in-drō'mē-ā). A relapse or recurrence of a disease. [G. *palindromos*, a running back, + *-ia*, condition]

**pal-in-drom-ic** (pal-in-drom'ik). Recurring.

**pal-i-sade** (pal'i-sād). In pathology, a row of elongated nuclei parallel to each other. [Fr. *palissade*, fr. L. *palus*, a pale, stake]

**pal-la-di-um** (Pd) (pā-lā'dē-ūm). A metallic element resembling platinum, atomic no. 46, atomic wt. 106.42. [fr. the asteroid, Pallas; G. *Pallas*, goddess of wisdom]

**pal-an-es-the-sia** (pal'an-es-thē'zē-ā). Absence of pallesthesia. SYN *apallesthesia*. [G. *pallō*, to quiver, + *anaisthēsia*, insensibility]

**pal-es-the-sia** (pal'es-thē'zē-ā). The appreciation of vibration, a form of pressure sense; most acute when a vibrating tuning fork is applied over a bony prominence. SYN *bone sensibility*, *pallesthetic sensibility*, *vibratory sensibility*. [G. *pallō*, to quiver, + *aisthēsis*, sensation]

**pal-es-thet-ic** (pal-es-thet'ik). Pertaining to pallesthesia.

**pal-li-al** (pal'ē-āl). Relating to the pallium.

**pal-li-ate** (pal'ē-āt). To reduce the severity of; to relieve slightly. SYN *mitigate*. [L. *palliatus* (adj.), dressed in a *pallium*, cloaked]

**pal-li-a-tive** (pal'ē-ā-tiv). Reducing the severity of; denoting the alleviation of symptoms without curing the underlying disease.

**pal-li-dal** (pal'i-dāl). Relating to the pallidum.

**pal-li-dec-to-my** (pal'i-dek'tō-mē). Excision or destruction of the globus pallidus, usually by stereotaxy; a prefix may indicate the method used, e.g., *chemopallidectomy* (destruction by a chemical agent), *cryopallidectomy* (destruction by cold). [pallidum + G. *ektomē*, excision]

**pal-li-do-a-myg-da-lot-o-my** (pal'i-dō-ā-mig'dā-lot'ō-mē). Production of lesions in the globus pallidus and amygdaloid nuclei. [pallidum + amygdala (1) + G. *tomē*, a cutting]

**pal-li-do-an-sot-o-my** (pal'i-dō-an-sot'ō-mē). Production of lesions in the globus pallidus and ansa lenticularis.

**pal-li-dot-o-my** (pal-i-dot'ō-mē). A destructive operation on the globus pallidus, done to relieve involuntary movements or muscular rigidity. [pallidum + G. *tomē*, incision]

**pal-li-dum** (pal'i-dūm) [TA]. SYN *globus pallidus*. [L. *pallidus*, pale]

**dorsal p.** [TA], those parts of the globus pallidus located generally dorsal to the plane of the anterior commissure; along with the dorsal striatum, functions in motor activities with cognitive origins; also form part of the dorsal basal ganglia. SYN *p. dorsale* [TA].

**p. dorsale** [TA], SYN *dorsal p.*

**ventral p.** [TA], those parts of the globus pallidus located ventral to the anterior commissure; includes portions of the substantia innominata; along with the ventral striatum believed to function in motor activities with strong motivational or emotional constructs. SYN *p. ventrale* [TA].

**p. ventrale** [TA], SYN *ventral p.*

**pal-li-um** (pal'ē-ūm) [TA]. SYN *cerebral cortex*. [L. *cloak*]

**pal-lor** (pal'ōr). Paleness, as of the skin. [L.]

**cachectic p.**, SYN *achromasia* (1).

**palm** (pahm, pawlm) [TA]. The flat of the hand; the flexor or anterior surface of the hand, exclusive of the thumb and fingers; the opposite of the dorsum of the hand. SYN *palma* [TA]. [L. *palma*]

**liver p.**, exaggerated erythema of the thenar and hypothenar eminences.

**pal-ma**, pl. **pal-mae** (pawl'mā, pawl'mē) [TA]. SYN *palm*, *palm*. [L.]

**p. ma'nus**, palm of the hand. SEE *palm*.

**pal-mar** (pawl'mār) [TA]. Referring to the palm of the hand; volar. SYN *palmaris* [TA]. [L. *palmaris*, fr. *palma*]

**pal-mar-is** (pawl-mār'is) [TA]. SYN *palmar*, *palmar*. [L.]

**pal-mel-lin** (pal'mel-in). A red coloring matter formed by an alga, *Palmella cruenta*.

**Palmer**, Walter L., U.S. physician, \*1896. SEE *P. acid test* for peptic ulcer.

**palm-ic** (pal'mik). Beating; throbbing; relating to a palmus.

**pal-mi-tal-de-hyde** (pal-mi-tal'dē-hīd). Hexadecanal; the 16-carbon aldehyde analog of palmitic acid; a constituent of plasmalogens.

**pal-mi-tate** (pal'mi-tāt). A salt of palmitic acid.

**pal-mit-ic ac-id** (pal-mit'ik). A common saturated fatty acid occurring in palm oil and olive oil as well as many other fats and waxes; the end product of mammalian fatty acid synthase. SYN *hexadecanoic acid*.

**pal-mi-tin** (pal'mi-tin). The triglyceride of palmitic acid occurring in palm oil. SYN *tripalmitin*.

**pal-mit-o-le-ic ac-id** (pal'mi-tō-lē'ik). 9-Hexadecenoic acid; a monounsaturated 16-carbon acid; one of the common constituents of the triacylglycerols of human adipose tissue. SYN *zoomaric acid*.

**pal-mi-tyl al-co-hol** (pal'mi-til). SYN *cetyl alcohol*.

**pal-mod-ic** (pal-mod'ik). Relating to palmus (1).

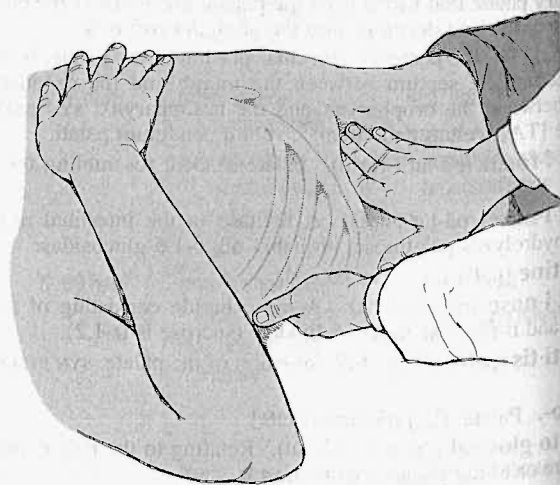
**pal-mos-co-py** (pal-mos'kō-pē). Examination of the cardiac pulsation. [G. *palmos*, pulsation, + *skopeō*, to examine]

**pal-mus**, pl. **pal-mi** (pal'mūs, -mī). 1. SYN *facial tic*. 2. Rhythmic fibrillary contractions in a muscle. SEE ALSO *jumping disease*. 3. The heart beat. [G. *palmos*, pulsation, quivering]

**pal-pa-ble** (pal'pā-bl). 1. Perceptible to touch; capable of being palpated. 2. Evident; plain. [see *palpation*]

**pal-pate** (pal'pāt). To examine by feeling and pressing with the palms of the hands and the fingers.

**pal-pa-tion** (pal-pā'shūn). 1. Examination with the hands, feeling for organs, masses, or infiltration of a part of the body, feeling the heart or pulse beat, vibrations in the chest, etc. 2. Touching, feeling, or perceiving by the sense of touch. [L. *palpatio*, fr. *palpo*, pp. *-atus*, to touch, stroke]



palpation of liver

**bimanual p.**, use of both hands to feel organs or masses, especially in the abdomen or pelvis.

**light-touch p.**, a method of determining the outlines of organs or masses by lightly palpating the surface with the tip of a finger.

**neuromuscular r.**, an agent, e.g., curare or succinylcholine, that produces relaxation of striated muscle by interruption of transmission of nervous impulses at the myoneural junction.

**nondepolarizing r.**, an agent, e.g., tubocurarine, that paralyzes skeletal muscle without depolarization of the motor endplate, as in phase II block.

**smooth muscle r.**, an agent, such as an antispasmodic, bronchodilator, or vasodilator, that reduces the tension or tone of smooth (involuntary) muscle.

**re-lax-a-tion** (rē-lak-sā'shūn). 1. Loosening, lengthening, or lessening of tension in a muscle. 2. In nuclear magnetic resonance, r. is the decay in magnetization of protons after the direction of the surrounding magnetic field is changed; the different rates of r. for individual nuclei and tissues are used to provide contrast in imaging. [L. *relaxatio* (see relax)]

**cardioesophageal r.**, r. of the lower esophageal sphincter, which can allow reflux of acidic gastric contents into the lower esophagus, producing esophagitis.

**isometric r.**, decrease in tension of a muscle while the length remains constant because of fixation of the ends.

**isovolumetric r.**, SYN isovolumic r.

**isovolumic r.**, that part of the cardiac cycle between the time of aortic valve closure and mitral opening, during which the ventricular muscle decreases its tension without lengthening so that ventricular volume remains unaltered; the heart is never precisely isovolumetric (vs. isovolumic) except during long diastoles with a midastolic period of diastasis. SYN isovolumetric r.

**longitudinal r.**, in nuclear magnetic resonance, the return of the magnetic dipoles of the hydrogen nuclei (magnetization vector) to equilibrium parallel to the magnetic field, after they have been flipped 90°; varies in rate in different tissues, taking up to 15 s for water. SEE TI. SYN spin-lattice r., spin-spin r.

**spin-lattice r.**, SYN longitudinal r.

**spin-spin r.**, SYN longitudinal r.

**transverse r.**, in nuclear magnetic resonance, the decay of the nuclear magnetization vector at right angles to the magnetic field after the 90° pulse is turned off; the signal is called free induction decay. SEE T2; Cf. longitudinal r.

**re-lax-in** (rē-lak'sin). A polypeptide hormone secreted by the corpora lutea of mammalian species during pregnancy. Facilitates the birth process by causing a softening and lengthening of the pubic symphysis and cervix; it also inhibits contraction of the uterus and may play a role in timing of parturition. SYN cervilaxin, ovarian hormone, relaxin. [relax + -in]

**re-learning** (rē-lern'ing). The process of regaining a skill or ability that has been partially or entirely lost; savings involved in r., as compared with original learning, give an index of the degree of retention.

**re-leas-in**. SYN relaxin.

**re-li-a-bil-i-ty** (rē-lī-ā-bil'i-tē). The degree of stability exhibited when a measurement is repeated under identical conditions. SEE correlation coefficient, reliability coefficient. [M.E. *relien*, fr. O.Fr. *relier*, fr. L. *religo*, to bind]

**equivalent form r.**, in psychology, the consistency of measurement based on the correlation between scores on two similar forms of the same test taken by the same individual. SEE ALSO reliability coefficient.

**interjudge r.**, in psychology, the consistency of measurement obtained when different judges or examiners independently administer the same test to the same individual. SYN interrater r.

**interrater r.**, SYN interjudge r.

**test-retest r.**, in psychology, the consistency of measurement based on the correlation between test and retest scores for the same individual. SEE ALSO coefficient, reliability.

**re-lief** (rē-lēf'). 1. Removal of pain or distress, physical or mental. 2. In dentistry, reduction or elimination of pressure from a specific area under a denture base. SEE ALSO relief area, relief chamber. [see relieve]

**re-lieve** (rē-lēv'). To free wholly or partly from pain or discomfort, either physical or mental. [through O. Fr. fr. L. *re-levo*, to lift up, lighten]

**re-line** (rē'līn'). In dentistry, to resurface the tissue side of a denture with new base material to make it fit more accurately. SEE ALSO rebase.

**REM 1.** Acronym for rapid eye movements, under movement. 2. Acronym for reticular erythematous mucinosis. SEE REM syndrome.

**rem** Abbreviation for roentgen-equivalent-man.

**Remak**, Robert, Polish-German anatomist and histologist, 1815–1865. SEE R. nuclear division, fibers, under fiber, ganglia, under ganglion, plexus.

**Remak**, Ernst J., German neurologist, 1848–1911. SEE R. reflex, sign.

**re-me-di-a-ble** (rē-mē'dē-ā-bl). Curable. [L. *remediabilis*, fr. *remedio*, to cure]

**re-me-di-al** (rē-mē'dē-āl). Curative or acting as a remedy.

**rem-e-dy** (rem'ē-dē). An agent that cures disease or alleviates its symptoms. [L. *remedium*, fr. *re-*, again, + *medeor*, cure]

**re-min-er-al-i-za-tion** (rē'min'er-āl-i-zā'shūn). 1. The return to the body or a local area of necessary mineral constituents lost through disease or dietary deficiencies; commonly used in referring to the content of calcium salts in bone. 2. In dentistry, a process enhanced by the presence of fluoride whereby partially decalcified enamel, dentin, and cementum become recalcified by mineral replacement.

**rem-i-nis-cence** (rem-i-nis'sens). In the psychology of learning, an improvement in recall, over that shown on the last trial, of incompletely learned material after an interval without practice. [L. *reminiscentiae*, from *reminiscor*, to remember]

**re-mis-sion** (rē-mish'ūn). 1. Abatement or lessening in severity of the symptoms of a disease. 2. The period during which such abatement occurs. [L. *remissio*, fr. *re-mitto*, pp. *-missus*, to send back, slacken, relax]

**spontaneous r.**, disappearance of symptoms without formal treatment.

**re-mit** (rē-mit'). To become less severe for a time without absolutely ceasing. [see remission]

**re-mit-tence** (rē-mit'ens). A temporary amelioration, without actual cessation, of symptoms.

**re-mit-tent** (rē-mit'ent). Characterized by temporary periods of abatement of the symptoms of a disease.

**rem-nant** (rem'nant). Something remaining, a residue or vestige. [O. Fr., fr. *remaindre*, to remain, fr. L. *remaneo*]

**re-mod-el-ing** (rē-mod'el-ing). 1. A cyclic process by which bone maintains a dynamic steady state through sequential resorption and formation of a small amount of bone at the same site; unlike the process of modeling, the size and shape of remodeled bone remain unchanged. 2. Any process of reshaping or reorganizing.

**heart chamber r.**, an architectural change in any cardiac chamber (usually one or both ventricles) due to a pathologic or normal (neonatal) stimulus.

**ren**, gen. **re-nis**, pl. **re-nes** (ren, rē'nīs, rē'nēz). SYN kidney. [L.]

**re-nal** (rē'nāl). SYN nephric.

**re-nat-ur-a-tion** (rē-nā-tū-rā'shūn). The conversion of a denatured and inactive macromolecule back to its natured and bioactive configuration.

**ren-cu-lus** (ren'koo-lūs). 1. SYN cortical lobules of kidney, under lobule. 2. SYN reniculus (2).

**Rendu**, Henri J.L.M., French physician, 1844–1902. SEE R.-Osler-Weber syndrome.

△ **reni-**. SEE reno-.

**ren-i-cap-sule** (ren'i-kap'sool). The capsule of the kidney. [reni- + L. *capsula*, capsule]

**ren-i-car-di-ac** (ren'i-kar'dē-ak). SYN cardiorenal. [reni- + G. *kardia*, heart]

**re-nic-u-lus**, pl. **re-nic-u-li** (rē-nik'ū-lūs, -lī). 1. SYN cortical lobules of kidney, under lobule. 2. A lobe of the human fetal kidney and that of some lower animals in which fibrous septa subdivide the organ. SYN renculus (2), renunculus (2). [L. dim. of *ren*, kidney]

**ren-i-form** (ren'i-fōrm). SYN nephroid.



**Indian s.**, SYN epidemic gangrenous proctitis.

**Jamaican vomiting s.**, SYN ackee poisoning.

**milk s.**, a disease of humans caused by ingesting contaminated milk from cows suffering from trembles; clinical manifestations include severe vomiting, labored breathing, delirium, convulsions, coma, and death; recovery from nonlethal illness is slow. SYN lactimorbus.

**morning s.**, the nausea and vomiting of early pregnancy. SYN morning vomiting, nausea gravidarum.

**motion s.**, the syndrome of pallor, nausea, weakness, and malaise, which may progress to vomiting and incapacitation, caused by stimulation of the semicircular canals during travel or motion as on a boat, plane, train, car, swing, or rotating amusement ride. SYN kinesia.

**mountain s.**, SYN altitude s.

**radiation s.**, a systemic condition caused by substantial whole-body irradiation, seen after nuclear explosions or accidents, rarely after radiotherapy. Manifestations depend on dose, ranging from anorexia, nausea, vomiting, and mild leukopenia, to thrombocytopenia with hemorrhage, severe leukopenia with infection, anemia, central nervous system damage, and death. SYN radiation poisoning.

**sea s.**, motion s. occurring in boat travelers.

**serum s.**, an immune complex disease appearing some days (usually 1–2 weeks) after injection of a foreign serum or serum protein, with local and systemic reactions such as urticaria, fever, general lymphadenopathy, edema, arthritis, and occasionally albuminuria or severe nephritis; originally described in patients receiving serotherapy. The term is sometimes used for clinically similar allergic reactions to drugs. SYN serum disease, serum reaction.

**sleeping s.**, SEE Gambian trypanosomiasis, Rhodesian trypanosomiasis.

**space s.**, dizziness as result of changes in inner ear resulting from absence of gravity. SYN physiologic vertigo.

**West African sleeping s.**, SYN Gambian trypanosomiasis.

**side** (sīd). One of the two lateral margins or surfaces of a body, midway between the front and back. [A.S. *sīde*]

**balancing s.**, in dentistry, the nonfunctioning s. from which the mandible moves during the working bite.

**working s.**, in dentistry, the lateral segment of a dentition toward which the mandible is moved during occlusal function.

**side effect**. A result of drug or other therapy in addition to or in extension of the desired therapeutic effect; usually but not necessarily, connoting an undesirable effect. Although technically the therapeutic effect carried beyond the desired limit (e.g., a hemorrhage from an anticoagulant) is a s. e., the term more often refers to pharmacologic results of therapy unrelated to the usual objective (e.g., a development of signs of Cushing syndrome with steroid therapy).

**sid-er-a-tion** (sid-er-ā'shūn). Any sudden attack, as of apoplexy. [L. *sideror*, pp. *sideratus*, to be blasted or palsied by a constellation, fr. *sidus* (*sider-*), a constellation, the heavens]

△**sidero-**. Iron. [G. *sidēros*]

**sid-er-o-blast** (sid-er-ō-blāst). An erythroblast containing granules of ferritin stained by the Prussian blue reaction. [sidero- + G. *blastos*, germ]

**sid-er-o-cyte** (sid-er-ō-sīt). An erythrocyte containing granules of free iron, as detected by the Prussian blue reaction, in the blood of normal fetuses, where they constitute from 0.10–4.5% of the erythrocytes. [sidero- + G. *kytos*, cell]

**sid-er-o-fi-bro-sis** (sid-er-ō-fī-brō'sis). Fibrosis associated with small foci in which iron is deposited.

**sid-er-og-en-ous** (sid-er-ōj'ē-nūs). Iron forming. [sidero- + G. -gen, producing]

**sid-er-o-pe-nia** (sid-er-ō-pē-nē-ā). An abnormally low level of serum iron. [sidero- + G. *penia*, poverty]

**sid-er-o-pe-nic** (sid-er-ō-pē-nik). Characterized by sideropenia.

**sid-er-o-phage** (sid-er-ō-fāj). SYN siderophore. [sidero- + G. *phagō*, to eat]

**sid-er-o-phil**, **sid-er-o-phile** (sid-er-ō-fil, -fil). 1. Absorbing

iron. SYN siderophilous. 2. A cell or tissue that contains iron. [sidero- + G. *philos*, fond]

**sid-er-oph-i-lins** (sid-er-ō-fil'in, -of'i-lin). Nonheme, iron-binding proteins; there are three central classes of s.: transferrin (1) (in vertebrate blood), lactoferrin (in mammalian milk and other secretions), and conalbumin or ovotransferrin (avian blood and avian egg white).

**sid-er-oph-i-lous** (sid-er-ōf'i-lūs). SYN siderophil (1).

**sid-er-o-phore** (sid-er-ō-fōr). A large extravasated mononuclear phagocyte containing granules of hemosiderin, found in the sputum or in the lungs of individuals with longstanding pulmonary congestion from left ventricular failure. SEE ALSO heart failure cell. SYN siderophage. [sidero- + G. *phoros*, bearing]

**sid-er-o-sil-i-co-sis** (sid-er-ō-sil'i-kō'sis). Silicosis due to inhalation of dust containing iron and silica. SYN silicosiderosis. [sidero- + silicosis]

**sid-er-o-sis** (sid-er-ō'sis). 1. A form of pneumoconiosis due to the presence of iron dust. 2. Discoloration of any part by disposition of a pigment containing iron; usually called hemosiderosis. 3. An excess of iron in the circulating blood. 4. Degeneration of the retina, lens, and uvea as a result of the deposition of intraocular iron. [sidero- + G. -osis, condition]

**pulmonary s.**, SYN pneumoconiosis siderotica.

**sid-er-ot-ic** (sid-er-ōt'ik). Related to siderosis; pigmented by iron or containing an excess of iron.

**SIDS** Acronym for sudden infant death syndrome.

**Siebert**, Ferdinand, German pediatrician, 1865–1946. SEE S. *sign*.

**Siegle**, Emil, German otologist, 1833–1900. SEE S. *otoscope*.

**sie-mens** (S) (sē'menz). The SI unit of electrical conductance; the conductance of a body with an electrical resistance of 1 ohm, allowing 1 ampere of current to flow per volt applied; equal to 1 mho. SYN mho. [Sir William Siemens, Ger. born British engineer, 1823–1883]

**Siemerling**, Ernst, German physician, 1857–1931.

**sieve** (siv). A meshed or perforated device for separating fine particles from coarser ones. [O.E. *sive*]

**molecular s.**, a gel-like material with pore sizes of such ranges as to exclude molecules above certain sizes; used in fractionating or purifying macromolecules.

**sie-vert** (Sv) (sē'vert). The SI unit of ionizing radiation effective dose, equal to the absorbed dose in gray, weighted for both the quality of radiation in question and the tissue response to that radiation. The unit is the joule per kilogram and 1 Sv = 100 rem. SEE effective dose, equivalent dose.

**SIF** Abbreviation for somatotropin release-inhibiting factor.

**Sig.** Abbreviation for L. *signa*, label, write, or *signetur*, let it be labeled.

**Siggaard-Andersen**, Ole, Danish clinical biochemist, \*1932. SEE Siggaard-Andersen nomogram.

**sigh** (sī). 1. An audible inspiration and expiration under the influence of some emotion. 2. To perform such an act. [A.S. *sican*]

**sight** (sīt). The ability or faculty of seeing. SEE ALSO vision. [A.S. *gesihth*]

**day s.**, SYN nyctalopia.

**far s.**, SYN hyperopia.

**long s.**, SYN hyperopia.

**near s.**, SYN myopia.

**night s.**, SYN hemeralopia.

**second s.**, improved near vision in the aged as a result of increased refractivity of the nucleus of the lens causing myopia. SYN senile lenticular myopia.

**short s.**, SYN myopia.

**sig-ma** (sig'mā). The 18th letter of the Greek alphabet, σ.

**sig-ma-tism** (sig'mā-tizm). SYN lisp. [G. *sigma*, the letter S]

**sig-moid** (sig'moyd). Resembling in outline the letter S or one of the forms of the Greek sigma. [G. *sigma*, the letter S, + *eidōs*, resemblance]

△**sigmoid-**. SEE sigmoido-

the impulses transmitted over the auditory nerve fibers corresponds to the frequency of the sound vibrations, and is the sole basis for pitch discrimination; a t. no longer tenable. SEE ALSO traveling wave t.

**thermodynamic t. of narcosis**, that the interposition of narcotic molecules in nonaqueous cellular phase causes changes that interfere with facilitation of ionic exchange.

**traveling wave t.**, generally held, that a wave travels from the base to the apex of the basilar membrane of the cochlea in response to acoustic stimulation, and that the site of maximal displacement of the basilar membrane depends on the frequency of the stimulating tone with higher frequencies causing maximal displacement near the base and lower frequencies causing maximal displacement near the apex.

**van't Hoff t.**, that substances in dilute solution obey the gas laws. Cf. van't Hoff law.

**Warburg t.**, that the development of cancer is due to irreversible damage to the respiratory mechanism of cells, leading to the selective multiplication of cells with increased glycolytic metabolism, both aerobic and anaerobic.

**Wollaston t.**, a t. that the semidecussation of the optic nerves at the chiasm is proved by the homonymous hemianopia seen in brain lesions.

**Young-Helmholtz t. of color vision**, a t. that there are three color-perceiving elements in the retina: red, green, and blue. Perception of other colors arises from the combined stimulation of these elements; deficiency or absence of any one of these elements results in inability to perceive that color and a misperception of any other color of which it forms a part. SYN Helmholtz t. of color vision.

**the-o-ther-a-py** (thē-ō-thār'ā-pē). Treatment of disease by prayer or religious exercises. [G. *theos*, god, + *therapeia*, therapy]

**thèque** (tek). A nest or aggregation of nevocytes in the epidermis. [Fr. a small box]

**ther-a-peu-sis** (thār-ā-pū'sis). 1. SYN therapeutics. 2. SYN therapy.

**ther-a-peu-tic** (thār-ā-pū'tik). Relating to therapeutics or to the treatment, remediating, or curing of a disorder or disease. [G. *therapeutikos*]

**ther-a-peu-tics** (ther-ā-pū'tiks). The practical branch of medicine concerned with the treatment of disease or disorder. SYN therapeutics (1), therapia (2). [G. *therapeutikē*, medical practice]

**ray t.**, obsolete term for radiotherapy.

**suggestive t.**, treatment of disease or disorder by means of suggestion.

**ther-a-peu-tist** (thār-ā-pū'tist). An older term to denote one skilled in therapeutics.

**the-ra-pia** (thār-ā-pē'ā). 1. SYN therapy. 2. SYN therapeutics. [L. fr. G. *therapeia*, therapy]

**t. mag'na sterili'sans**, Ehrlich concept that an infectious disease, especially one of protozoal origin, can be cured by one large dose of a suitable remedy, large enough to sterilize all the tissues and to destroy the microorganism contained therein.

**ther-a-pist** (thār-ā-pist). One professionally trained and/or skilled in the practice of a particular type of therapy.

## THERAPY

**ther-a-py** (ther-ā-pē). 1. The treatment of disease or disorder by any method. SEE ALSO therapeutics. 2. In psychiatry, and clinical psychology, a short term for psychotherapy. SEE ALSO psychotherapy, psychiatry, psychology, psychoanalysis. SYN therapeutics (2), therapia (1). [G. *therapeia*, medical treatment]

**alkali t.**, SEE alkalitherapy.

**analytic t.**, short term for psychoanalytic t.

**anticoagulant t.**, the use of anticoagulant drugs to reduce or prevent intravascular or intracardiac clotting.

**antisense t.**, use of antisense DNA for the inhibition of transcription or translation of a specific gene or gene product for therapeutic purposes.

**autoserum t.**, t. with serum obtained from the patient's own blood.

**aversion t.**, a form of behavior t. that pairs an unpleasant stimulus with undesirable behavior(s) so that the patient learns to avoid the latter. SEE ALSO aversive training.

**behavior t.**, an offshoot of psychotherapy involving the use of procedures and techniques associated with research in the fields of conditioning and learning for the treatment of a variety of psychologic conditions; distinguished from psychotherapy because specific symptoms (e.g., phobia, enuresis, high blood pressure) are selected as the target for change, planned interventions or remedial steps to extinguish or modify these symptoms are then employed, and the progress of changes is continuously and quantitatively monitored. SEE systematic desensitization. SYN conditioning t.

**client-centered t.**, a system of nondirective psychotherapy based on the assumption that the client (patient) both has the internal resources to improve and is in the best position to resolve his or her own personality dysfunction, provided that the therapist can establish a permissive, accepting, and genuine atmosphere in which the client feels free to discuss problems and to obtain insight into them in order to achieve self-actualization.

**cognitive t.**, any of a variety of techniques in psychotherapy that utilizes guided self-discovery, imaging, self-instruction, symbolic modeling, and related forms of explicitly elicited cognitions as the principal mode of treatment.

**collapse t.**, the surgical treatment of pulmonary tuberculosis whereby the diseased lung is placed, totally or partially, temporarily or permanently, in a nonfunctional respiratory state of retraction and immobilization. Now rarely performed.

**conditioning t.**, SYN behavior t.

**conjoint t.**, a type of t. in which a therapist sees the two spouses, or parent and child, or other partners together in joint sessions.

**convulsive t.**, SYN electroshock t.

**cytoreductive t.**, t. with the intention of reducing the number of cells in a lesion, usually a malignancy.

**depot t.**, injection of a drug together with a substance that slows the release and prolongs the action of the drug.

**diathermic t.**, treatment of various lesions by diathermy.

**directly observed t.**, visual monitoring by a health care worker of ingestion of medications, to ensure compliance in difficult or long-term regimens, such as in oral treatment for tuberculosis; a contentous aspect of some WHO programs.

**electroconvulsive t. (ECT)**, SYN electroshock t.

**electroshock t. (ECT)**, a form of treatment of mental disorders in which convulsions are produced by the passage of an electric current through the brain. SYN convulsive t., electroconvulsive t.

**electrotherapeutic sleep t.**, treatment by inducing sleep by means of nonconvulsive electric stimulation of the brain.

**estrogen replacement t.**, administration of sex hormones to women after menopause or oophorectomy. SYN hormone replacement t.

Administration of estrogen after natural or surgical menopause reverses atrophic vaginitis, relieves vasomotor instability ("hot flashes"), lowers LDL cholesterol, raises HDL cholesterol, reduces the risk of osteoporosis and colorectal cancer, and may retard onset and progression of parkinsonism, Alzheimer dementia, and type 2 diabetes mellitus. Observational studies have found lower rates of coronary artery disease (CAD) in postmenopausal women taking estrogen, but clinical trials have not confirmed this effect. A large randomized study of postmenopausal women with established CAD showed no difference between women taking estrogen-progestogen and controls in the incidence of fatal and nonfatal myocardial infarction, congestive heart failure, stroke, and in total mortality. In limited stud-

th

**em-phy-sem-a-tous** (em-fi-sem'ă-tūs). Relating to or affected with emphysema.

**em-pir-ic** (em-pir'ik). 1. SYN empirical. 2. A member of a school of Graeco-Roman physicians, late BC to early AD, who placed their confidence in and based their practice purely on experience, avoiding all speculation, theory, or abstract reasoning; they were little concerned with causes or with correlating symptoms in order to gain a true understanding of a disease, even holding basic knowledge, physiology, pathology, and anatomy in low esteem and of no value in practice. 3. Modern: testing a hypothesis by careful observation, hence rationally based on experience. [see empirical]

**em-pir-i-cal** (em-pir'i-kāl). 1. Founded on practical experience, rather than on reasoning alone, but not established scientifically, in contrast to rational (1). 2. Relating to an empiric (2). 3. Based on careful observational testing of a hypothesis; rational. SYN empiric (1). [G. *empeirikos*; fr. *empeiria*, experience, fr. *en*, in, + *peira*, a trial]

**em-pir-i-cism** (em-pir'i-sizm). A looking to experience as a guide to practice or to the therapeutic use of any remedy.

**em-por-i-at-rics** (em-pōr-ē-at'riks). The specialty of travel medicine, dealing with diseases that travelers can acquire, especially in the tropics. [G. *emporion*, market, fr. *emporos*, traveler, merchant, + (*technē*) *iatrikē*, medical art]

**em-pros-thot-o-nos** (em'pros-thot'ō-nūs). A tetanic contraction of the flexor muscles, curving the back with concavity forward. [G. *emprosthen*, forward, + *tonos*, tension]

**em-py-ec-to-my** (em-pī-ek'tō-mē). Resection of an empyema and its capsule.

**em-py-e-ma** (em-pī-ē'mă, -pī-ē'mă). Pus in a body cavity; when used without qualification, refers specifically to pyothorax. [G. *empyēma*, suppuration, fr. *en*, in, + *pyon*, pus]

**e. benignum**, SYN latent e.

**e. of gallbladder**, severe acute cholecystitis with purulent inflammation of the gallbladder.

**latent e.**, the presence of pus in a cavity, especially one of the accessory sinuses, unattended by subjective symptoms. SYN e. benignum.

**loculated e.**, pyothorax in which pleural adhesions form one or more pockets containing pus.

**mastoid e.**, SYN mastoiditis.

**e. necessita'tis**, e. necessitans, a form of pyothorax in which the pus burrows to the outside, producing a subcutaneous abscess that finally ruptures through the skin; it may result in spontaneous recovery without requiring an operation.

**e. of the pericardium**, SYN purulent *pericarditis*.

**pneumococcal e.**, infection of the pleural cavity by *Streptococcus pneumoniae*, the pneumococcus, with pus formation.

**pulsating e.**, a large, tense collection of pus in the pleural cavity through which the cardiac pulsations are transmitted to the chest wall.

**streptococcal e.**, purulent exudation into the pleural cavity caused by infection with *Streptococcus hemolyticus*.

**em-py-e-mic** (em-pī-ē'mik). Relating to empyema.

**em-py-e-sis** (em-pī-ē'sis). A pustular eruption. [G. suppuration]

**em-py-o-cele** (em'pī-ō-sēl). A suppurating hydrocele; a collection of pus in the scrotum. [G. *en*, in, + *pyon*, pus, + *kēlē*, tumor]

**em-py-reu-ma** (em-pī-roo'mă). Characteristic odor given off by organic substances when charred or subjected to destructive distillation in closed vessels. [G. a banked fire]

**emu** Abbreviation for electromagnetic unit.

**emul-gent** (ē-mūl'jent). Denoting a straining, extracting, or purifying process. [L. *e-mulgeo*, pp. *-mulsus*, to milk out, drain out]

**emul-si-fi-er** (ē-mūl'si-fi-er). An agent, such as gum arabic or the yolk of an egg, used to make an emulsion of a fixed oil. Soaps, detergents, steroids, and proteins can act as emulsifiers; they stabilize 2-phase systems of oil and aqueous phases.

**emul-si-fy** (ē-mūl'si-fi). To make in the form of an emulsion.

**emul-sin** (ē-mūl'sin). 1. A preparation or ferment derived from

almonds, that contains  $\beta$ -glucosidase. 2. Sometimes used as a synonym for  $\beta$ -glucosidase.

**emul-sion** (ē-mūl'shūn). A system containing two immiscible liquids in which one is dispersed, in the form of very small globules (internal phase), throughout the other (external phase) (e.g., oil in water (milk) or water in oil (mayonnaise)). [Mod. L. fr. *e-mulgeo*, pp. *-mulsus*, to milk or drain out]

**emul-sive** (ē-mūl'siv). 1. Denoting a substance that can be made into an emulsion. 2. Denoting a substance, such as a mucilage, by which a fat or resin can be emulsified. 3. Making soft or pliant. 4. Yielding a fixed oil on pressure.

**emul-oid** (ē-mūl'soyd). A colloidal dispersion in which the dispersed particles are more or less liquid and exert a certain attraction on and absorb a certain quantity of the fluid in which they are suspended. SYN emulsion colloid, hydrophil colloid, hydrophilic colloid, lyophilic colloid.

**em-u-re-sis** (em-ū-rē'sis). A condition in which urinary excretion and intake of water act to produce an absolute hydration of the body. SEE ALSO ecuresis. [G. *en* (em), in, + *ourēsis*, urination]

**emyl-ca-mate** (ē-mil'kă-māt, em-il-kam'āt). A mild sedative, used to control tension and anxiety and to relieve pain and muscular spasm.

△ **en-**. In; appears as em- before b, p, or m. [G.]

**en-al-a-pril-at** (ē-nal'ă-pril-āt). The active metabolite of enalapril, an ACE inhibitor used to treat hypertension and congestive heart failure.

**enal-a-pril-ma-le-ate** (e-nal'ă-pril). A prodrug for enalaprilat, an angiotensin converting enzyme inhibitor used as an anti-hypertensive agent and in the treatment of congestive heart failure.

**enam-el** (ē-nam'ēl) [TA]. The hard glistening substance covering the exposed portion of the tooth. In its mature form, it is composed of an inorganic portion made up of 90% hydroxyapatite and 6-8% calcium carbonate, calcium fluoride, and magnesium carbonate, the remainder comprising an organic matrix of protein and glycoprotein; structurally, it is made up of oriented rods each of which consists of a stack of rodlets encased in an organic prism sheath. SYN enamelum [TA], substantia adamantina, substantia vitrea. [M.E., fr. Fr. *enamailer*, to apply enamel, fr. *en*, on, + *amail*, enamel, fr. Germanic]

**dwarfed e.**, SYN nanoid e.

**interrod e.**, e. occupying the space between e. rods and serving to bind them together.

**mottled e.**, alterations in e. structure due to excessive fluoride ingestion during tooth formation; varies in appearance from small white opacities to yellow and black spotting.

**nanoid e.**, a condition of abnormal thinness of the e. SYN dwarfed e.

**whorled e.**, e. in which the rods assume a spiral or twisting course.

**en-am-el-ins**. A class of proteins that form the organic matrix of mature tooth enamel. [enamel + -in]

**enam-el-o-blast** (en-am'el-ō-blast). SYN ameloblast.

**enam-el-o-gen-e-sis** (ē-nam'ēl-ō-jen'ē-sis). SYN amelogenesis.

**e. imperfec'ta**, SYN *amelogenesis imperfecta*.

**enam-el-o-ma** (ē-nam-ēl-ō'mă). A developmental anomaly in which there is a small nodule of enamel below the cemento-enamel junction, usually at the bifurcation of molar teeth. SYN enamel drop, enamel nodule, enamel pearl.

**enam-e-lum** (ē-nam'ē-lūm) [TA]. SYN enamel.

**enan-thal** (ē-nan'thāl). SYN heptanal.

**enan-thate** (ē-nan'thāt). USAN-approved contraction for heptanoate,  $\text{CH}_3(\text{CH}_2)_5\text{COO}^-$ .

**en-an-them**, **en-an-the-ma** (en-an'them, en-an-thē'mă). A mucous membrane eruption, especially one occurring in connection with one of the exanthemas. [G. *en*, in, + *anthēma*, bloom, eruption, fr. *antheō*, to bloom]

△ **enantio-**. Combining form meaning opposite or reversed. [G. *enantios*, opposite]

**en-an-ti-o-mer** (ē-nan'tē-ō-mer). One of a pair of molecules that are nonsuperimposable mirror images of each other; neither mole-

en