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tubular excretory m., the m. of functioning excretory tubules of the kidney determined from the excretion of measurable compounds processed in the kidney primarily by tubular secretion.

mas-sa, gen. and pl. **mas-sae** (mas'sā, mas'sē) [TA]. SYN *mass* (1). [L.]

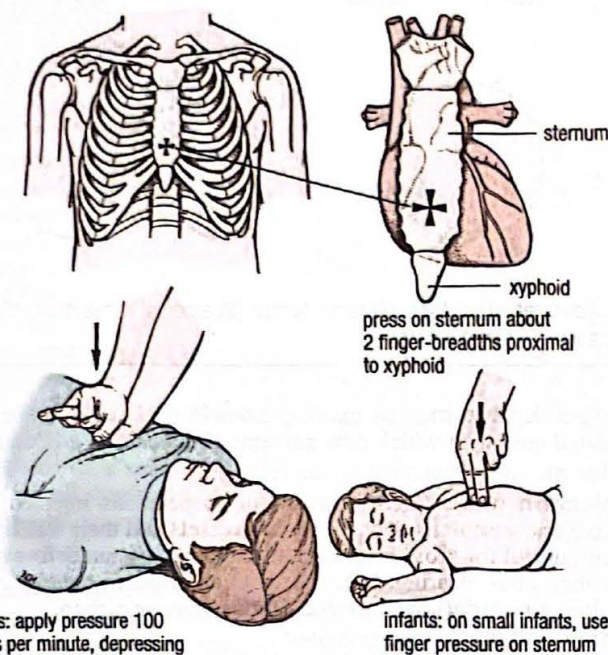
m. intermedia, ★ official alternate term for *interthalamic adhesion*.

m. lateralis atlantis [TA]. SYN *lateral mass* of atlas.

mas-sage (mā-sahzh'). A method of manipulation of the body or part of the body by rubbing, pinching, kneading, or tapping. SYN *tripsis* (2). [Fr. from G. *massō*, to knead]

cardiac m., SYN *heart m.*

closed chest m., rhythmic compression of the heart between sternum and spine by depressing the lower sternum backward with the heels of the hands, the patient lying supine. See this page. SYN *external cardiac m.*



adults: apply pressure 100 times per minute, depressing sternum about 1.5–2 cm

infants: on small infants, use finger pressure on sternum

closed chest massage

external cardiac m., SYN *closed chest m.*

gingival m., mechanical stimulation of the gingiva by rubbing or pressure.

heart m., rhythmic m. of the heart either in an open chest or through the chest wall to renew failed circulation during cardiac resuscitation. SYN *cardiac m.*

open chest m., rhythmic manual compression of the ventricles of the heart with the hand inside the thoracic cavity.

prostatic m., (1) manual expression of prostatic secretions by digital rectal technique; (2) the emptying of prostatic acini and ducts by repeated downward compression maneuvers, for treatment of various congestive and inflammatory prostatic conditions.

vibratory m., rapid tapping of a surface using a soft-tipped device. SYN *seismotherapy*, *sismotherapy*, *vibrotherapeutics*.

Mas-se-lon (mas'ē-law'), Julián, French physician, 1844–1917. SEE *Masselon spectacles*.

mas-se-ter (mas'ē-tēr). SEE *masseter* (*muscle*).

mas-seur (mā-ser'). 1. A man who massages. 2. An instrument used in mechanical massage. [Fr. see *massage*]

mas-seuse (mā-suz'). A woman who massages.

mas-si-cot (mas'i-kot). SYN *lead monoxide*.

Mas-son (mah-sawn[h]'), Pierre, Canadian pathologist, 1880–1959. SEE *M.-Fontana ammoniac silver stain*. See entries under *stain*.

mas-so-ther-a-py (mas'ō-thār'ā-pē). The therapeutic use of massage. [G. *massō*, to knead, + *therapeia*, treatment]

mass spectrometry (mas spek-trom'ē-trē). The analysis obtained using a mass spectrograph.

MAST (mast) Acronym for military antishock trousers.

mast- (mast). SEE *masto-*.

mas-tad-e-ni-tis (mas'tad-ē-nī'tis). SYN *mastitis*. [masto- + G. *adēn*, gland, + *-itis*, inflammation]

mas-tad-e-no-ma (mas'tad-ē-nō'mā). An adenoma of the breast. [masto- + G. *adēn*, gland, + *-ōma*, tumor]

Mas-tad-e-no-vi-rus (mas-tad'ē-nō-vī'rūs). A genus of the family *Adenoviridae*, including adenoviruses that infect mammals, with over 40 antigenic types (species) being infective for humans. They cause respiratory infections in children, epidemic acute respiratory disease in military recruits, acute follicular conjunctivitis in adults, epidemic keratoconjunctivitis and gastroenteritis; many infections are inapparent. [G. *mastos*, breast, hence mammal, + *adenovirus*]

mas-tal-gi-a (mas-tal'jē-ā). SYN *mastodynia*. [masto- + G. *algos*, pain]

mas-tat-ro-phy, **mas-ta-tro-phia** (mas-tat'rō-fē, mast-ā-trō'fē-ā). Atrophy or wasting of the breasts. [masto- + *atrophy*]

mas-tau-xe (mas-tawk'sē). Hypertrophy of the breast. [masto- + G. *auxē*, increase]

mas-tec-to-my (mas-tek'tō-mē). Excision of the breast. SYN *mammectomy*. [masto- + G. *ektomē*, excision]

extended radical m., excision of the entire breast including the nipple, areola, and overlying skin, as well as the pectoral muscles and the lymphatic-bearing tissues of the axilla and chest wall and internal mammary chain of lymph nodes.

modified radical m., excision of the entire breast including the nipple, areola, and overlying skin, as well as the lymphatic-bearing tissue in the axilla with preservation of the pectoral muscles.

radical m., excision of the entire breast including the nipple, areola, and overlying skin, as well as the pectoral muscles, lymphatic-bearing tissue in the axilla, and various other neighboring tissues.

simple m., excision of the breast including the nipple, areola, and some of the overlying skin. SYN *total m.*

subcutaneous m., excision of the breast tissues, but sparing the skin, nipple, and areola; usually followed by implantation of a prosthesis.

total m., SYN *simple m.*

Mas-ter (mas'tēr), Arthur M., U.S. physician, 1895–1973. SEE *M. test*, two-step exercise *test*.

Mas-ters (mas'tērz), William H., 20th-century U.S. gynecologist. SEE *Allen-M. syndrome*.

mas-tic (mas'tik). A resinous exudate from *Pistacia lentiscus* (family *Anacardiaceae*), a small tree of the Mediterranean; used in chewing gum, as an enteric coating, and as a temporary filling material in dentistry. SYN *mastich*, *mastiche*. [G. *mastichē*, the resin of the mastich tree]

mas-ti-cate (mas'ti-kāt). To chew; to perform mastication.

mas-ti-ca-tion (mas'ti-kā'shūn). The process of chewing food in preparation for deglutition and digestion; the act of grinding or comminuting with the teeth. See page 1161. [L. *mastico*, pp. -atus, to chew]

mas-ti-ca-to-ry (mas'ti-kā-tō-rē). Relating to mastication.

mas-tich, **mas-ti-che** (mas'tik, mas'ti-kē). SYN *mastic*.

Mas-ti-goph-o-ra (mas'ti-gof'ō-rā). The flagellates, a subphylum of Protozoa having one or more flagella, a single vesicular nucleus, and symmetric binary fission; sexual reproduction is unknown in many groups (e.g., *Volvox*, *Trypanosoma*, *Euglena*). It consists of two classes: *Phytomastigophorea* (to which *Euglena* belongs), which contains chlorophyll and is therefore photosynthetic and holophytic (although this has secondarily been lost in some groups), and *Zoomastigophorea* (including *Trypanosoma* and *Leishmania*), which lacks chromatophores and is heterotro-

P. parvulus, former name for *Atopobium parvulum*.

P. plagarumbelli, a bacterial species commonly found in septic war wounds.

P. productus, former name for *Ruminococcus productus*.

P. putridus, a bacterial species found in the human mouth and intestinal tract but especially in the vagina.

per-. Do not confuse this prefix with peri-. 1. Through, conveying intensity. 2. In chemistry, a prefix denoting either 1) more or most, with respect to the amount of a given element (usually oxygen, as in perchloric acid) or radical contained in a compound, or 2) the degree of substitution for hydrogen, as in peroxides, peroxy acids (e.g., hydrogen peroxide, peroxyformic acid). SEE ALSO peroxy-. [L. through, throughout, extremely]

per-a-ceph-a-lus (per'ă-sef'ă-lūs). An omphalosite lacking head and upper limbs, and with a defective thorax; typically, the body consists of little more than pelvis and lower limbs. [per- + G. *a-* priv. + *kephalē*, head]

per-ac-id (per'as'id). An acid containing a peroxide group (-O-OH); e.g., peracetic acid. SYN peroxy acid.

per-a-cute (per'ă-kyūt). Very acute; said of a disease. [L. *peracutus*, very sharp]

per an-um (per ā'nūm). By or through the anus. [L.]

per-ar-tic-u-la-tion (per'ar-tik'yū-lă'shūn). SYN synovial joint. [per- + L. *articulatio*, joint]

per-a-to-dyn-i-a (per'ă-tō-din'ē-ă). Obsolete term for pyrosis. [G. *peratos*, on the opposite side, + *odynē*, pain]

per-ax-il-lar-y (per-ak'si-lăr'ē). Through the axilla.

per-a-zine (per'ă-zēn). An antipsychotic.

per-cen-tile (per-sen'til). The rank position of an individual in a serial array of data, stated in terms of what percentage of the group the individual equals or exceeds.

per-cept (per'sept). 1. That which is perceived; the complete mental image, formed by the process of perception, of an object or idea. 2. In clinical psychology, a single unit of perceptual report, such as one of the responses to an inkblot in the Rorschach test. [L. *perceptum*, a thing perceived]

per-cep-tion (per-sep'shūn). The mental process of becoming aware of or recognizing an object or idea; primarily cognitive rather than affective or conative, although all three aspects are manifested. SYN esthesia (1).

concept-driven p., recognition of phenomena in the external world as shaped by one's internalized constructs, representational system, beliefs, opinions, theoretic orientation, agenda, and personality traits, among other considerations.

depth p., the visual ability to judge depth or distance.

extrasensory p. (ESP), p. by means other than through the ordinary senses; e.g., telepathy, clairvoyance, precognition.

simultaneous p., a combination of two slightly dissimilar images into a single image.

per-cep-tive (per-sep'tiv). Relating to or having a higher than normal power of perception.

per-cep-tiv-i-ty (per'sep-tiv'i-tē). The power of perception.

per-cep-to-ri-um (per'sep-tō'rē-ūm). SYN sensorium (2).

per-co-la-tion (per'kō-lă'shūn). 1. SYN filtration. 2. Extraction of the soluble portion of a solid mixture by passing a solvent liquid through it. 3. Passage of saliva or other fluids into the interface between tooth structure and restoration; sometimes induced by thermal changes. [L. *percolatio*, fr. per- + *col*, to strain]

per-co-la-tor (per'kō-lă'tōr). A funnel-shaped vessel used for the process of percolation in pharmacy.

per-co-morph oil (per'kō-mōrf oyl). A liver oil from fish of the order Percomorphi, with a standardized amount of vitamins A and D.

per con-tig-u-um (per kon-tig'yū-ūm). In contiguity; denoting the mode by which an inflammation or other morbid process spreads into an adjacent contiguous structure. [per- + L. *contiguus*, touching, fr. *tango*, to touch]

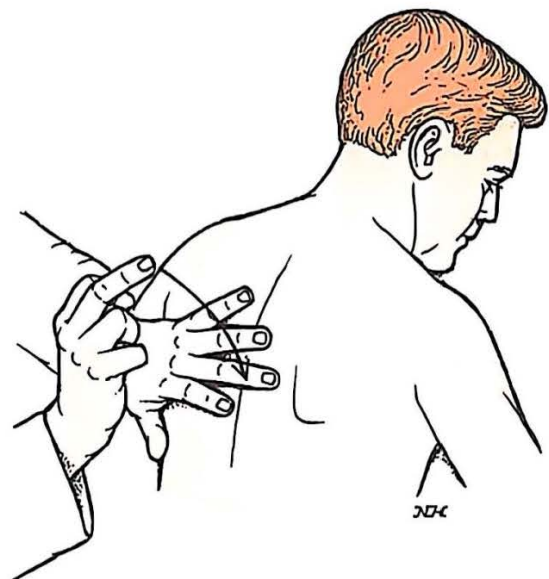
per con-tin-u-um (per kon-tin'yū-ūm). In continuity; continuous; denoting the mode by which an inflammation or other morbid process spreads from one part to another through continuous tissue. [per- + L. *continuus*, holding together, continuous, fr. *teneo*, to hold]

per-cuss (per-kūs'). To perform percussion.

per-cus-sion (per-kūsh'ūn). 1. A diagnostic procedure designed to determine the density of a body part by the sound produced by tapping the surface with the finger or a plessor; performed primarily over the chest to determine presence of normal air content in the lungs and over the abdomen to evaluate air in the loops of intestine and the size of solid organs such as the liver and spleen. 2. A form of massage, consisting of repeated blows or taps of varying force. [L. *percussio*, fr. per-cutio, pp. -cussus, to beat, fr. *quatio*, to shake, beat]

auscultatory p., auscultation of the chest or other part at the same time that p. is made, to facilitate hearing of the sound made by p.

bimanual p., p. in which the finger of one hand taps the other hand; a form of mediate p. See this page.



percussion: distal phalanx of left middle finger (for a right-handed examiner) is pressed firmly against the body wall and a brisk bouncing blow is struck on the middle of the phalanx or base of the distal phalanx of the middle finger with the tip of the flexed finger of the opposite hand

clavicular p., p., usually direct, along the entire clavicle to demonstrate dullness, particularly in apical pulmonary tuberculosis.

deep p., heavy p. to obtain information about deeply situated organs or structures.

direct p., SYN immediate p.

finger p., p. in which a finger of one hand is used as a plessimeter and one of the other hand as a plessor.

immediate p., the striking of the part under examination directly with the finger or a plessor, without the intervention of another finger or plessimeter. SYN direct p.

mediate p., p. effected by the intervention of a finger or a plessimeter between the striking finger or plessor and the part percussed.

Murphy p. (mūr'fē), examination for dullness by striking the chest wall directly with the fingertips of one hand successively, beginning with the fifth finger. SYN piano p.

palpatory p., finger p. in which attention is focused on the resistance and reverberation of the tissues under the finger as well as on the sound elicited.

piano p., SYN Murphy p.

threshold p., p. effected by means of a glass rod as a plessime-

ter, with the rod inclined to the wall of the chest or abdomen and touching it only by one extremity.

per-cus-sor (per-kūs'ōr). *SYN* **plessor**.

per-cu-ta-ne-ous (per'kyū-tā'nē-ūs). Denoting the passage of substances through unbroken skin, as in absorption by inunction; also passage through the skin by needle puncture, including introduction of wires and catheters by *Seldinger technique*. *SYN* transcutaneous, transdermic.

per-en-ceph-a-ly (per'en-sef'ā-lē). A condition marked by one or more cerebral cysts. [G. *pēra*, a purse, a wallet, + *enkephalos*, brain]

Pe-rez (pā-rā'), Bernard, French physician, 1836–1903. *SEE* P. *reflex*.

Pe-rez (pā-rāth'), George V., 20th-century Spanish physician. *SEE* Pérez *sign*.

per-fec-tion-ism (per-fek'shūn-izm). A tendency to set rigid high standards of performance for oneself.

per-fla-tion (per-flā'shūn). Blowing air into or through a cavity or canal to force apart its walls or to expel any contained material. [L. *per-flo*, pp. *-flatus*, to blow through]

per-flu-bron (per-flū'brōn). Generic name for perfluorooctyl bromide.

perfluoro-. Prefix indicating replacement of all hydrogen atoms in a hydrocarbon with fluorine.

per-fluor-o-oc-tyl bro-mide (PFOB) (per-flōr'ō-ok'til brō'mīd). A bromine-substituted fluorocarbon, prepared as a particulate emulsion, used as a CT, MRI, and ultrasound contrast medium.

per-fo-rans (per'fō-rans). A term applied to several muscles and nerves that, in their course, perforate other structures. [L. *perforating*]

per-fo-rat-ed (per'fō-rāt'ed). Pierced with one or more holes. [L. *perforatus*, fr. *per-foro*, pp. *-atus*, to bore through]

per-fo-ra-tion (per'fō-rā'shūn). Abnormal opening in a hollow organ or viscus. *See* page B21. *SYN* **tresis**. [see perforated]

per-fo-ra-tor (per'fō-rā'tōr). An instrument for making a bony opening through the cranium. *SYN* **trephine** (1).

per-for-in (per'fōr-in). A protein found in the cytoplasmic granules of both T-cytotoxic lymphocytes and natural killer cells. This protein is implicated in target cell lysis by the above cells. [L. *per-foro*, to bore, pierce, + *-in*]

per-for-mic ac-id (per-fōr'mik as'id). An organic peracid (HCOOOH) leaving disulfide links in peptides by oxidizing cystinyl residues to cysteic acid. *SYN* **peroxyformic acid**.

per-frig-er-a-tion (per-frij'ēr-ā'shūn). A minor degree of frostbite. [L. *per-frigero*, pp. *-atus*, to make cold, fr. *frigus*, cold]

per-fus-ate (per'fyūz'āt). The fluid used for perfusion; sometimes more broadly applied to fluid that has been forced through any more or less porous membrane or material. [see perfuse]

per-fuse (per-fyūs'). To force blood or other fluid to flow from the artery through the vascular bed of a tissue or to flow through the lumen of a hollow structure (e.g., an isolated renal tubule). Cf. *perifuse*, *superfuse*. [L. *perfusio*, fr. *per-* + *fusio*, a pouring]

per-fu-sion (per-fyū'zhūn). 1. The act of perfusing. 2. The flow of blood or other perfusate per unit volume of tissue, as in ventilation: perfusion ratio.

regional p., p. of part of the body, especially a limb, and particularly with chemotherapeutic agents, for treatment of a malignant tumor, primary, recurrent, or metastatic.

perfusionist (pēr-fyū'shūn-ist). The operator of an oxygenator, such as the extracorporeal membrane oxygenator during surgery.

per-hy-dro-cy-clo-pen-ta[a]phen-an-threne (per-hī'drō-sī'klō-pen'tā-fen-an'thrēn). *SYN* **tetracyclic steroid nucleus**.

peri-. Do not confuse this prefix with *para-*, *pari-*, or *per-*. Around, about, near. Cf. *circum-*. [G. around]

per-i-ac-cre-tio pe-ri-car-di-i (per'ē-ā-krē'shē-ō per'i-kar'

dē-ī). Adhesion of the parietal pericardium or part of it to the cardiac surface due to antecedent inflammation.

per-i-ac-i-nal, per-i-ac-i-nous (per'ē-as'i-nāl, -i-nūs). Surrounding an acinus.

per-i-ad-e-ni-tis (per'ē-ad'ē-nī'tis). Inflammation of the tissues surrounding a gland. [peri- + G. *adēn*, gland, + *-itis*, inflammation]

p. mucosa necrotica recurrens, *SYN* *aphthae* major, under *aphtha*.

per-i-a-nal (per'ē-ā'nāl). *SYN* **circumanal**.

per-i-an-gi-o-cho-li-tis (per'ē-an'jē-ō-kō-lī'tis). *SYN* **pericholangitis**. [peri- + G. *angeion*, vessel, + *cholē*, bile, + *-itis*, inflammation]

per-i-an-gi-tis (per'ē-an-jī'tis). Inflammation of the adventitia of a blood vessel or a lymphatic vessel or of the tissues surrounding it. *SEE ALSO* **periarteritis**, **periphlebitis**, **perilymphangitis**. *SYN* **perivasculitis**. [peri- + G. *angeion*, a vessel, + *-itis*, inflammation]

per-i-a-or-tic (per'ē-ā-ōr'tik). Surrounding or adjacent to the aorta.

per-i-a-or-ti-tis (per'ē-ā-ōr-tī'tis). Inflammation of the adventitia of the aorta and of the tissues surrounding it.

per-i-a-pex (per'ē-ā'peks). The periapical structures, particularly periodontal membrane and adjacent bone. [peri- L. *apex*, tip]

per-i-ap-i-cal (per'ē-ap'i-kāl). 1. At or around the apex of a root of a tooth. 2. Denoting the periapex.

per-i-ap-pen-di-ci-tis (per'ē-ā-pen'di-sī'tis). Inflammation of the tissue surrounding the vermiform appendix. *SYN* **para-appendicitis**.

p. decidualis, the presence of decidual cells in the peritoneum of the vermiform appendix in cases of right tubal pregnancy with adhesions between the uterine tube and the appendix.

per-i-ap-pen-dic-u-lar (per'ē-ap'en-dik'yū-lār). Surrounding an appendix, especially the vermiform appendix.

per-i-ar-te-ri-al (per'ē-ar-tē-rē-āl). Surrounding an artery.

per-i-ar-te-ri-tis (per'ē-ar-tē-rī'tis). Inflammation of the adventitia of an artery. *SYN* **exarteritis**.

p. nodosa, *SYN* **polyarteritis nodosa**.

per-i-ar-thric (per'ē-ar'thrik). *SYN* **circumarticular**.

per-i-ar-thri-tis (per'ē-ar'thri'tis). Inflammation of the parts surrounding a joint. [peri- + *arthritis*]

per-i-ar-tic-u-lar (per'ē-ar-tik'yū-lār). *SYN* **circumarticular**.

per-i-a-tri-al (per'ē-ā'trē-āl). Surrounding the atrium of the heart. *SYN* **periauricular** (1).

per-i-au-ric-u-lar (per'ē-aw-rik'yū-lār). 1. *SYN* **periatrinal**. 2. *SYN* **periconchal**. 3. Around the external ear.

per-i-ax-i-al (per'ē-ak'sē-āl). Surrounding an axis.

per-i-ax-il-lar-y (per'ē-ak'sē-lār-ē). *SYN* **circumaxillary**.

per-i-ax-o-nal (per'ē-ak'sō-nāl). Surrounding the axon of a nerve. [peri- + G. *axōn*, axis]

per-i-blast (per'i-blast). A specialized region of yolk surface immediately peripheral to the blastoderm in telolecithal eggs. [peri- + G. *blastos*, germ]

per-i-bron-chi-al (per'i-brong'kē-āl). Surrounding a bronchus or the bronchi.

per-i-bron-chi-o-lar (per'i-brong'kē-ō-lār). Surrounding the bronchioles.

per-i-bron-chi-o-li-tis (per'i-brong'kē-ō-lī'tis). Inflammation of the tissues surrounding the bronchioles.

per-i-bron-chi-tis (per'i-brong-kī'tis). Inflammation of the tissues surrounding the bronchi or bronchial tubes.

per-i-buc-cal (per'i-būk'āl). Surrounding the cheek.

per-i-bul-bar (per'i-būl'bār). Surrounding any bulb, especially the eyeball or the bulb of the urethra. *SYN* **circumbulbar**.

per-i-bur-sal (per'i-būr'sāl). Surrounding a bursa.