

J

J Symbol for joule.

Jaboulay's amputation (zhă'boo-lăz') [Mathieu Jaboulay, Fr. surgeon, 1860–1913] Amputation of the thigh and removal of the hip bone.

Jaboulay's button Two cylinders that may be screwed together for lateral intestinal anastomosis without the use of sutures.

Jaccoud's syndrome (zhă-kooz) [François Sigismond Jaccoud, Fr. physician, 1830–1913] A rare joint disease in which recurring bouts of arthritis affect multiple joints. The fingers show prominent ulnar deviation with subluxation of the metacarpals that can be reduced manually; typically there is no loss of cartilage or bone erosion. This syndrome has been associated with several diseases, including rheumatic fever, progressive systemic sclerosis, sarcoidosis, and systemic lupus erythematosus.

jacket [O.Fr. *jacquet*, jacket] A bandage usually applied to the trunk to immobilize the spine or correct deformities.

porcelain j. A jacket crown tooth restoration made of porcelain.

jack screw (jăk'skroo) A threaded screw used for expanding the dental arch or for positioning bone fragments after a fracture.

jacksonian seizure (jăk-sō'nē-ăn) [John Hughlings Jackson, Brit. neurologist, 1835–1911] A localized form of epilepsy with spasms confined to one part or one group of muscles. SEE: *epilepsy*.

Jackson Pratt drain (jăk'sôn prăt) A soft tube that is placed in an operative site to drain blood and inflammatory fluid following surgery. The tube is connected to a compressed, small plastic bulb. The compression creates suction; the bulb expands as it fills. The collected liquid is emptied and measured when the bulb is about 60% filled, and the bulb is recompressed. The drains are removed when only minimal drainage is observed. Fluid in a surgical wound interferes with healing, can place pressure on suture sites, and increases the risk of infection.

Jackson's syndrome A dysfunction of cranial nerves X through XII caused by medullary lesions, resulting in unilateral muscle paralysis in the head, the mouth including the soft palate, and the vocal cords.

Jacob, Arthur (jă'kôb) Irish ophthalmologist, 1790–1874.

J. ulcer A deep ulceration of the facial skin caused by locally invasive basal cell carcinoma.

Jacquemier's sign (zhăk-mē-ăz') [Jean

Jacquemier, Fr. obstetrician, 1806–1879] Blue or purple color of the vaginal mucosa; a presumptive sign of pregnancy.

jactatio (jăk-tă'shē-ō) [L., tossing] Restless tossing of the head and body; seen in acute illness. SYN: *jactitation*.

j. capitis nocturna A form of sleep disturbance characterized by nocturnal head-banging.

jactitation (jăk'tī-tă'shūn) [L. *jactitatio*, tossing] Jactatio.

Jaeger's test types (yă'gêrz) [Eduard Jaeger von Jastthal, Austrian ophthalmologist, 1818–1884] Lines of type of various sizes, printed on a card for testing near vision. The smallest type read at the closest distance is recorded.

jamais vu (zhăm'ă voo) [Fr., never seen] The subjective sense of being in a completely strange environment when in familiar surroundings. It may be associated with temporal lobe lesions. SEE: *déjà vu*.

James fibers (jămz) [T. N. James, U.S. cardiologist and physiologist, b. 1925] A pathway for conduction of cardiac impulses so that they bypass the atrioventricular node. This alternate fiber pathway permits pre-excitation of the ventricle with resultant tachycardia.

Janeway lesion (jăn'wăy) [Edward Gamaliel Janeway, U.S. physician, 1841–1911] A small, painless, red-blue macular lesion a few millimeters in diameter; found on the palms and soles in patients with subacute bacterial endocarditis. SEE: *Osler's nodes*; *Roth's spots*.

janiceps (jăn'ī-sêps) [L. *Janus*, a two-faced god, + *caput*, head] A deformed embryo having a face on both the anterior and the posterior aspects of the single head.

Jansky-Bielschowsky syndrome (jăn'skē-bē-ăl-show'skē) [Jan Jansky, Czech physician, 1873–1921; Max Bielschowsky, Ger. neuropathologist, 1869–1940] ABBR: CLN2. A neuronal ceroid lipofuscinosis that first becomes evident in late infancy or early childhood, usually at age 2 to 4 years.

Janus family of protein kinases (jăn'is) ABBR: JAK. A group of enzymes that influence the growth and differentiation of cells through their impact on cytokine receptors. SEE: *protein kinase*.

Japanese spotted fever A spotted fever transmitted to humans by the bite of *Ixodes* ticks infected with *Rickettsia japonica*, also known as *R. helvetica*. The disease has been identified mostly in Japan and Korea.

jar 1. A container made of glass, plastic,

or other sturdy material. It is usually taller than it is wide and may be cylindrical, square, or another shape. **2.** To move suddenly, as in a jolt or shock.

bell j. A glass vessel with an opening at only one end.

heel j. The production of pain by having the patient stand on tiptoes and suddenly bring the heels to the floor. This physical finding may be suggestive of spinal disease, pelvic inflammatory disease in women, or kidney stones, among other ailments.

jar (jǎr'gün) [O.Fr., a chattering] **1.** Paraphasia. **2.** The technical language or specialized terminology used by those in a specific profession or group.

jaundice (jawn'dis) [Fr. *jaune*, yellow] A condition marked by yellow staining of body tissues and fluids, as a result of excessive levels of bilirubin in the bloodstream. Jaundice is not usually visible until the total bilirubin level rises above 3 mg/dl. Jaundice is a symptom of an array of illnesses, including those marked by any of the following:

Obstruction of the biliary tract by gallstones, inflammatory masses, or tumors (e.g., cholecystitis, pancreatic carcinoma);

Slowing of the release of bile from hepatic portals (e.g., cholestasis);

Alteration of bile metabolism at the cellular level (e.g., in genetic diseases such as Gilbert's disease);

Release of bilirubin because of liver cell injury by toxins or viruses (e.g., acetaminophen overdose; hepatitis B virus infection);

Release of bile pigments as a result of the destruction or ineffective manufacturing of red blood cells (e.g., hemolysis; hereditary spherocytosis); or

Resorption of bile from hematomas within the body, esp. after trauma.

SYN: *icterus*.

SYMPTOMS: Deposits of bilirubin in the skin often cause itching. Other symptoms of jaundice depend on whether the bilirubin is direct (conjugated [i.e., soluble in body fluids]) or indirect (unconjugated). Obstructive jaundice, e.g., causes conjugated hyperbilirubinemia; in this disease, bile pigments dissolve in the urine, which turns bright green, and the stool appears gray or white owing to the deprivation of bile.

DIAGNOSIS: Tests to determine the cause of jaundice include a carefully performed history and physical exam, urinalysis (positive for bilirubin only in conjugated hyperbilirubinemia), liver function tests, blood tests for hepatitis, and abdominal ultrasonography. Invasive diagnostic testing with cholangiography, endoscopic retrograde cholangiopancreatography, or percutaneous trans-hepatic cholangiography is performed when occult biliary obstruction is suspected.

TREATMENT: The precise cause of jaundice must be determined in each patient to provide suitable therapies. For example, patients with gallstones obstructing the cystic duct need surgical treatment, and newborns with severe jaundice may require treatment with ultraviolet light to prevent kernicterus, but jaundiced patients with acute hepatitis A usually heal with symptomatic rather than specific remedies.

acholuric j. Jaundice without bile pigment in the urine. That is, jaundice in which the majority of the excess bilirubin is unconjugated.

breastfeeding j. An exaggerated physiological jaundice of the newborn. It may result initially from hemoconcentration due to inadequate fluid intake.

breast milk j. Hyperbilirubinemia resulting from pregnanediol or free fatty acids that inhibit bilirubin conjugation. Serum bilirubin level usually peaks above 20 ml/dl by 14 to 21 days of age. Some pediatricians recommend stopping breastfeeding for 24 to 36 hr if the level exceeds 20 ml/dl. If the infant's bilirubin level drops rapidly, the mother may resume nursing.

cholestatic j. Jaundice produced by failure of bile to flow to the duodenum. It may be caused by intrahepatic bile duct obstruction (e.g., in certain drug reactions), liver cell damage (e.g., in viral hepatitis), or extrahepatic obstruction to the flow of bile (e.g., in cholecystitis).

congenital j. Jaundice occurring at or shortly after birth.

hematogenous j. Hemolytic jaundice.

hemolytic j. Jaundice caused by the fragmentation of red blood cells and the release of unconjugated bilirubin in the bloodstream. This finding is associated with hemolytic anemia (HA). Because the bilirubin is not conjugated by the liver, it is not soluble in water and does not discolor the urine. Many conditions may be responsible, including congenital HA; sickle cell anemia; autoimmune HA (e.g., in infectious mononucleosis or *Mycoplasma pneumoniae* infections); microangiopathic HA (e.g., in hemolytic uremic syndrome); or transfusion-associated HA. SYN: *hematogenous jaundice*; *hemolytic icterus*; *nonobstructive icterus*.

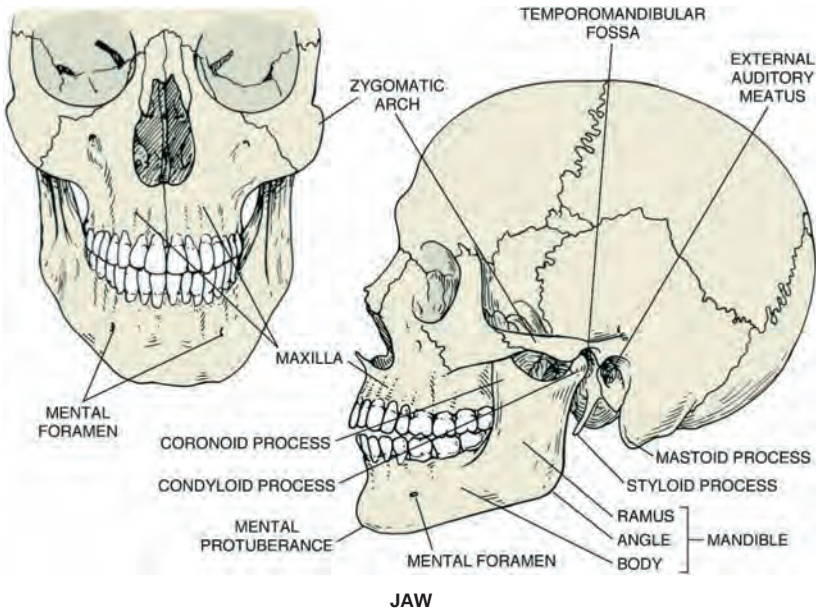
hemorrhagic j. Leptospirosis jaundice.

hepatocellular j. Jaundice resulting from disease of liver cells, e.g., in acute hepatitis. SYN: *parenchymatous jaundice*.

infectious j. Infectious hepatitis.

leptospiiral j. Jaundice caused by leptospirosis. SYN: *hemorrhagic jaundice*.

j. of newborn Nonpathological jaundice affecting newborns, usually resulting from the destruction of red blood



cells by the immature liver at birth. The destruction of red blood cells causes unconjugated bilirubin to accumulate in the blood and skin. Benign neonatal jaundice manifests 48 to 72 hr after birth, lasts only a few days, and typically does not require therapy.

PATIENT CARE: Levels of bilirubin less than 2 in the first week of life are common, occurring in about 80% of premature babies and half of all full-term babies. They are typically not hazardous to the developing infant. When jaundice develops in the first 24 hr of life, however, or when bilirubin levels exceed published guidelines, kernicterus (neurotoxicity caused by bilirubin) may develop. Infants with potentially damaging levels of bilirubin in the blood are treated with phototherapy (bili lights). SEE: *hemolytic disease of the newborn; isoimmunization; kernicterus; phototherapy; Nursing Diagnoses Appendix.* SYN: *icterus neonatorum.*

nonhemolytic j. Jaundice due to abnormal metabolism of bilirubin or to biliary tract obstruction, and not to excessive destruction of red blood cells.

obstructive j. Jaundice caused by a mechanical impediment to the flow of bile from the liver to the duodenum. Gallstones are the most common cause. Cholangitis, obstructing cancers, cysts, parasites in the biliary ducts, or hepatic abscesses are responsible less frequently. SYN: *obstructive icterus; postobstructive jaundice; regurgitation jaundice.*

SYMPTOMS: The condition is marked by yellow staining of the skin, mucous

membranes, sclera, and secretions. The patient may complain of pruritus caused by bile pigments in the skin. The urine is yellow or green, but the stools turn light or clay-colored because of absence of bile pigment in the intestinal tract. Acute obstruction to the flow of bile causes right upper quadrant pain and may be associated with biliary colic due to entrapment of gallstones.

TREATMENT: Cholecystectomy with common bile duct exploration (choledochostomy) is used to resolve obstructive jaundice caused by gallstones. Radical surgeries (e.g., the Whipple procedure) or stenting of the biliary tract with or without external damage may temporarily relieve obstructive jaundice caused by cancer.

parenchymatous j. Hepatocellular jaundice.

pathological j. of newborn Hemolytic disease of the newborn.

postobstructive j. Obstructive jaundice.

regurgitation j. Obstructive jaundice.

retention j. Jaundice resulting from the inability of liver cells to remove bile pigment from circulation.

spirochetal j. Leptospirosis.

toxic j. Jaundice resulting from chemical injury to the liver or sepsis.

jaw [ME. *iawe*] Either or both of the maxillary and mandibular bones, bearing the teeth and forming the mouth framework. SEE: *illus.*

cleft j. An early embryonic malformation resulting in lack of fusion of the right and left mandible into a single bone.

crackling j. Noise in the normal or diseased temporomandibular joint during movement of the jaw. SYN: *crepitation*.

dislocation of j. Traumatic or spontaneous displacement of the mandible. Jaw dislocations are uncomfortable and may be psychologically distressing. They may occur on either side, in which instance the tip of the jaw is pointed away from the dislocation. On the unaffected side, just in front of the ear, may be felt a little hollow or depression that is often tender. If both sides of the jaw are dislocated, the jaw is pushed downward and backward. In either event, there is pain and difficulty in speech and the condition is often accompanied by shock. Backward dislocation of the jaw is rare.

CAUSES: Jaw dislocation is usually caused by a blow to the face or by keeping the mouth open for long periods as in dental treatment, but occasionally may be caused by chewing large chunks of food, yawning, or hearty laughing. A fall or blow on the chin could cause dislocation, but backward dislocation seldom occurs without fracture or extreme trauma.

REDUCTION: These dislocations are reduced by placing well-padded thumbs inside of the mouth on the lower molar (back) teeth with the fingers running along the outside of the jaw as a lever. The thumbs should press the jaw downward and backward. The jaw will glide posteriorly over the ridge of bone (articular eminence), which can be felt, and just as this occurs the jaw usually snaps into place. When this motion is noted, the thumbs should be moved laterally toward the cheeks to keep them from being crushed between the molars.

This snapping into place is due to an involuntary spasm of the muscles, which pulls the jaw as though an overstretched rubber band were attached to it. Following the reduction, an immobilizing bandage or double cravat should be applied.



It is important that the hands be protected by heavy gloves to prevent trauma by the teeth. SEE: *Standard Precautions Appendix*.

lumpy j. Actinomycosis.

swelling of j. In the lower jaw, a condition that may be due to alveolar abscess, a cyst, gumma, sarcoma, or actinomycosis. In the upper jaw, this sign may occur in alveolar abscess, parotid tumor, parotitis, carcinoma, sarcoma, necrosis of bone, or disease of antrum.

jawbone Unscientific term used to indicate the maxilla or mandible.

jaw thrust A maneuver used to open the airway of unconscious patients or of patients who cannot control their own air-

way, by jutting the patient's jaw forward, which in turn moves the tongue away from the back of the throat. This procedure is used especially in opening the airway of patients with suspected spinal injury, because the cervical spine is not moved during a properly performed jaw thrust.

jaw winking Involuntary movements of the eyelid when the jaw is elevated or depressed. This may be seen in patients who have recovered from Bell's palsy. SEE: *Marcus Gunn syndrome*.

jazz ballet bottom An abscess in the cleft between the buttocks, caused by excessive exertion combined with chafing of the skin.

JCAHO *Joint Commission on Accreditation of Healthcare Organizations*, now known simply as "The Joint Commission."

Jebson-Taylor Hand Function Test (jěb'sěn-tā'lór) A standardized battery of tasks used to measure upper extremity function.

Jefferson fracture (jěf'ěr-sǒn) [Geoffrey Jefferson, British neurologist and neurosurgeon, 1886–1961] A burst fracture of the first cervical vertebra (atlas), usually involving the anterior and posterior arches, that results from compression of the cervical spine. Jefferson fractures are classified as stable when the transverse ligament is intact and unstable when the ligament has been ruptured. The majority of Jefferson fractures are associated with other spinal pathology, esp. fractures of the second cervical vertebra (axis). SEE: *halo vest*.

SYMPTOMS: The patient may complain of pain arising from the upper cervical spine but may not demonstrate signs or symptoms of neurological impairment. On x-ray examination, odontoid views may demonstrate displacement of the C1-C2 facets. Lateral and flexion-extension views are needed to ascertain the status of the transverse ligament.

TREATMENT: For unstable fracture, cranial traction, skeletal traction, and/or halo vest are applied for a total of 3 months. A nondisplaced stable fracture may be treated with the use of a soft cervical collar. Stable fractures with less than 7 mm displacement require the use of a rigid cervical collar. Follow-up evaluations should be performed regularly, to rule out insidious subluxation of the first cervical vertebra.

jejunal (jě-jū'nāl) [L. *jejunum*, empty] Rel. to the jejunum.

jejunectomy (jě'jū-něk'tō-mě) [J + Gr. *ektome*, excision] Excision of part or all of the jejunum.

jejunitis (jě'jū-nī'tis) [J + Gr. *itis*, inflammation] Inflammation of the jejunum, caused by one of many possible diseases, including bacterial infections,

celiac sprue, Crohn's disease, ischemia, radiation, injury, or vasculitis. SYN: *inflammation of jejunum*.

jejun- [L.] Combining form meaning *jejunum*.

jejunocoecostomy (jĕ-'joo'nō-sē-kōs'tō-mē) [" + *caecum*, blindness, + Gr. *stoma*, mouth] The formation of a passage between the cecum and jejunum.

jejunocolostomy (jĕ-'jū'nō-kōl-ōs'tō-mē) [" + Gr. *kolon*, colon, + *stoma*, mouth] The formation of an artificial passage between the jejunum and colon.

jejunoleal (jĕ-'joo'nō-īl'ē-āl) [" + *ileum*, small intestine] Concerning the jejunum and ileum.

jejunoleitis (jĕ-'jū'nō-īl'ē-ī'tīs) [" + " + Gr. *itis*, inflammation] Inflammation of the jejunum and ileum.

jejunoleostomy (jĕ-'jū'nō-īl'ē-ōs'tō-mē) [" + " + Gr. *stoma*, mouth] The formation of a passage between the jejunum and ileum.

jejunojejunostomy (jĕ-'jū'nō-jĕ-'jū-nōs'tō-mē) [" + *jejunum*, empty, + Gr. *stoma*, mouth] The formation of a passage between two parts of the jejunum.

jejunorrhaphy (jĕ-'joo-nor'ā-fē) [" + Gr. *rhaphe*, seam, ridge] Surgical repair of the jejunum.

jejunostomy (jĕ-'jū-nōs'tō-mē) [" + Gr. *stoma*, mouth] Surgical creation of an opening into the jejunum.

needle catheter j. ABBR: NCJ. A jejunostomy created by using a needle to insert a catheter into the jejunum. It is intended exclusively for feeding, created by direct surgical approach or percutaneously. SEE: *percutaneous endoscopic j.*

percutaneous endoscopic j. ABBR: PEJ. A jejunostomy created for feeding purposes with the use of an endoscope and guide wire.

venting j. A jejunostomy constructed with a portal used either to facilitate sampling the contents of the jejunum or to inspect its interior with an endoscope.

jejunostomy tube A tube placed directly into the jejunum for long-term enteral feeding. This may be done laparoscopically, with a percutaneous endoscopic jejunostomy tube, or surgically. It is not as commonly used as the gastrostomy tube.

jejunotomy (jĕ-'jū-nōt'ō-mē) [" + Gr. *tome*, incision] Surgical incision into the jejunum.

jejunum (jĕ-'jū-nūm) [L., empty] The second part of the small intestine. It grades imperceptibly into the ileum, the final part of the small intestine. The jejunum has a wider diameter (avg. 3 cm) and larger, taller, and more closely packed internal circular folds (*plicae circulares*) than the ileum. It has few lymphoid nodules (Peyer's patches). The jejunum is about 2.5 m (8.5 feet) long.

inflammation of j. Jejunitis.

jelly [L. *gelare*, to freeze] A thick, semi-solid, gelatinous mass.

contraceptive j. Water-soluble gel introduced into the vagina for the prevention of conception. It serves as a vehicle for spermicides. SEE: *contraceptive*.

mineral j. Petrolatum.

petroleum j. Petrolatum.

vaginal j. Water-soluble gel introduced into the vagina for therapeutic or contraceptive purposes.

Wharton's j. SEE: *Wharton's jelly*.

Jendrassik's maneuver (yĕn-'drā'sīks) [Ernő Jendrassik, Hungarian physician, 1858–1921] A method used to facilitate elicitation of the deep tendon reflexes of the lower extremities. The patient hooks together the fingers of the hands and attempts to pull them apart. While this pressure is maintained, the patellar or Achilles tendon reflex is tested.

Jenner, Edward (jĕn-'ēr) British physician (1749–1823) who invented the vaccination for smallpox. Jenner observed that individuals exposed to cowpox, such as those who milked cows, would develop a minor skin lesion and then be immune to smallpox. From this observation, he developed a vaccine from cowpox lesions, which provides immunity to smallpox.

Jenner's stain [Louis Jenner, Brit. physician, 1866–1904] Eosin methylene blue stain.

jerk (jĕrk) A colloquial term for reflex.

Achilles j. Achilles tendon reflex.

ankle j. SEE: *ankle clonus reflex*.

biceps j. SEE: *biceps reflex*.

elbow j. Elbow reflex.

jaw j. Chin reflex.

knee j. The extension of the lower leg upon striking the patellar tendon when the knee is flexed at a right angle. Knee jerk is absent in locomotor ataxia, infantile paralysis, meningitis, destructive lesions of the lower part of the spinal cord, and certain forms of paralysis. It is increased in lesions of pyramidal areas, brain tumors, spinal irritability, and cerebrospinal sclerosis. SEE: *reflex, knee-jerk*.

tendon j. The contraction of a muscle after tapping its tendon.

triceps surae j. Achilles tendon reflex.

Jerusalem syndrome (jĕ-'roo'sā-lĕm) A temporary or permanent delusional disorder following a pilgrimage to Jerusalem, characterized by extreme religious preoccupations or the belief that the pilgrim has become the embodiment or incarnation of an important biblical character.

jet lag The commonly used, colloquial term for desynchronization.

jig A mechanical device used to maintain a stable, correct relationship between a piece of work and a tool, or between components during assembly.

jigger (jĭg-'ēr) Common name for parasitic fleas called *Tunga penetrans*. SEE: *chiggers*.

Jimson weed (jīm'sŏn) Stramonium.

Jin Bu Huan (jīn-bū-whān') An herb (*Lycopodium seratum*) promoted as a sedative and hypnotic. Its use has been associated with acute hepatitis in some patients.

Jin shin do, Jin shin jyutsu (jīn shīn dō, joo'tsoo) [Japanese, "way of the compassionate spirit"] A form of acupressure developed by Jiro Murai in the 1900s and used by practitioners of alternative medicine to treat selected health problems.

jitters (jīt'ērz) Shakes.


job aid Any database used to direct, guide, or support task performance at work.

Jobst pressure garment (jōbst) An elastic garment fabricated to apply varying pressure gradients to an area. It may be worn over severely burned areas for the purpose of reducing hypertrophic scarring as wounds heal or may be used to prevent or control lymphedema in the arms or legs.

Job's syndrome (jōbz) [Job, biblical character] Recurrent staphylococcal infections of the skin related to impaired immune defenses.

Jocasta complex (jō-kās'tā) [Jocasta, mythical character who was the wife and mother of Oedipus] The psychological or emotional fixation of a mother toward her son. SEE: *Oedipus complex*.

Joffroy's reflex (zhōf-rwház') [Alexis Joffroy, Fr. physician, 1844–1908] Twitching of the gluteal muscles when pressure is applied to the buttocks.

 **jogger's heel** An irritation of the fibrous and fatty tissue covering the heel. The condition is due to the type of running characteristic of jogging, in which the heel strikes the surface first, rather than that of sprinting, in which the toes strike first. Persons prone to develop this may diminish the risk by wearing pads on their heels and by running on surfaces softer than wood, concrete, or asphalt.

jogging Running for enjoyment or to maintain physical fitness. In contrast to running, jogging is not a competitive exercise and is performed at a submaximal intensity.

John Doe, Jane Doe (jŏn dō) **1.** In law, a fictitious name used when that of the actual defendant is unknown. **2.** Name assigned to an unidentified patient (e.g., one admitted to a hospital in a coma) or to an unidentified corpse brought to the hospital for confirmation of death.

Johnson, Dorothy (jŏn'sŏn) A nursing educator (1919–1999) who developed the Behavioral System Model of Nursing. SEE: *Nursing Theory Appendix*.


joint [L. *unctio*, a joining] The place where two or more bones meet. Some joints are fixed or immobile attachments of bones, while other joints allow the bones to move along each other. A

joint usually has a thin, smooth articular cartilage on each bony surface and is enclosed by a joint capsule made of fibrous connective tissue. It is classified as being immovable (synarthrosis), slightly movable (amphiarthrosis), or freely movable (diarthrosis). *Synarthrosis* is a joint in which the two bones are separated only by an intervening membrane, such as the cranial sutures. *Amphiarthrosis* is a joint having a fibrocartilaginous disk between the bony surfaces (symphysis), such as the symphysis pubis; or one with a ligament uniting the two bones (syndesmosis), such as the tibiofibular articulation. *Diarthrosis* is a joint in which the adjoining bone ends are covered with a thin cartilaginous sheet and joined by a joint capsule lined by a synovial membrane, which secretes synovial fluid, a lubricant. SYN: *arthrosis* (1). SEE: *illus.*

MOVEMENT: Joints are also grouped according to motion: ball and socket (enarthrosis); hinge (ginglymus); condyloid; pivot (trochoid); gliding (arthrodia); and saddle joint.

Joints can move in four ways: *gliding*, in which one bony surface glides on another without angular or rotatory movement; *angular*, occurring only between long bones, increasing or decreasing the angle between the bones; *circumduction*, occurring in joints composed of the head of a bone and an articular cavity, the long bone describing a series of circles, the whole forming a cone; and *rotation*, in which a bone moves about a central axis without moving from this axis. Angular movement, if it occurs forward or backward, is called flexion or extension, respectively; away from the body, abduction; and toward the median plane of the body, adduction.

Because of their location and constant use, joints are prone to stress, injury, and inflammation. The main diseases affecting the joints are rheumatic fever, rheumatoid arthritis, osteoarthritis, and gout. Injuries are contusions, sprains, dislocations, and penetrating wounds.

 **acromioclavicular j.** ABBR: AC joint. A gliding or plane joint between the acromion and the acromial end of the clavicle.

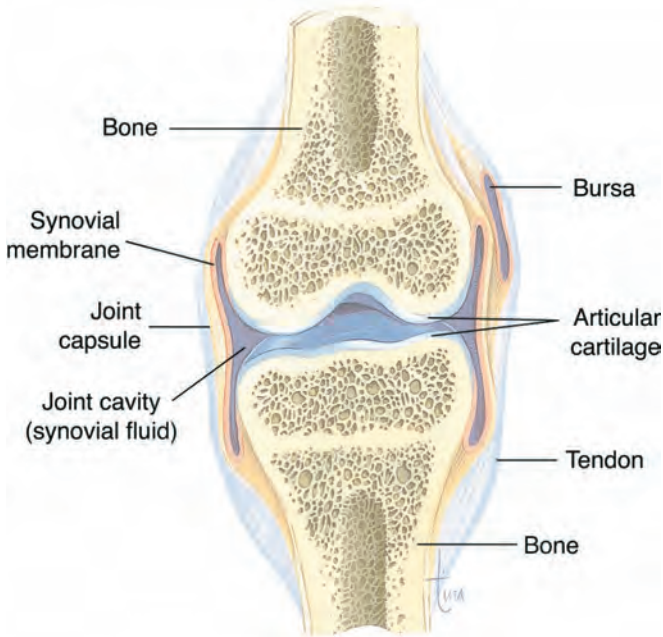
amphidiarthrodial j. A joint that is both ginglymoid and arthrodial.

ankle j. Ankle.

j. approximation A rehabilitation technique whereby joint surfaces are compressed together while the patient is in a weight-bearing posture for the purpose of facilitating cocontraction of muscles around a joint.

arthrodial j. Diarthrosis permitting a gliding motion. SYN: *gliding joint*.

ball-and-socket j. A joint in which the round end of one bone fits into the cavity



SYNOVIAL JOINT

of another bone. SYN: *enarthrodial joint*; *multiaxial joint*; *polyaxial joint*.

biaxial j. A joint possessing two chief movement axes at right angles to each other.

bilocular j. A joint separated into two sections by interarticular cartilage.

bleeders' j. Hemorrhage into joint space in hemophiliacs. SYN: *hemophilic joint*.

cartilaginous j. A joint in which there is cartilage between the bones.

Charcot's j. SEE: *Charcot's joint*.

Chopart's j. The union of the remainder of the tarsal bones with the calcaneus and talus.

Clutton's j. SEE: *Clutton's joint*.

compound j. A joint made up of several bones.

condylar j. Ellipsoid j.

condyloid j. A joint permitting all forms of angular movement except axial rotation.

cracking j. The sound produced by forcible movement of a joint by contracting the muscles that contract or extend a joint, esp. the metacarpophalangeal joints. The cause is not known. SEE: *crepitation*.

craniomandibular j. The encapsulated, double synovial joints between the condylar processes of the mandible and the temporal bones of the cranium. The double synovial joints are separated by an articular disk and function

as an upper gliding joint and a lower modified hinge or ginglymoid joint. SYN: *temporomandibular joints*.

diarthrodial j. A joint characterized by the presence of a cavity within the capsule separating the bones, thus permitting considerable freedom of movement.

elbow j. The hinge joint between the humerus and the ulna.

ellipsoid j. A joint having two axes of motion through the same bone. SYN: *condylar joint*.

enarthrodial j. Ball-and-socket joint.

false j. False joint formation subsequent to a fracture.

fibrous j. Joints connected by fibrous tissue.

flail j. A joint that is extremely relaxed, the distal portion of the limb being almost beyond the control of the will.

ginglymoid j. A synovial joint having only forward and backward motion, as a hinge. SYN: *hinge joint*; *ginglymus*.

gliding j. Arthrodial joint.

hemophilic j. Bleeders' joint.

hinge j. a synovial joint in which two bones flex and extend in only one plane, usually because side (collateral) ligaments limit the direction of motion, e.g., elbow joint.

hip j. A synovial ball-and-socket joint in which the head of the femur fits into the acetabulum of the hip bone. More than seven separate ligaments hold the

joint together and restrict its movements.

intercarpal j. Articulations formed by the carpal bones in relation to one another.

knee j. The joint formed by the femur, patella, and tibia.

j. mice Free bits of cartilage or bone present in the joint space, esp. the knee joint. These are usually the result of previous trauma, and may or may not be symptomatic.

midcarpal j. A joint separating the navicular, lunate, and triangular bones from the distal row of carpal bones.

mortise j. The ankle joint.

movable j. A slightly movable or freely movable joint, amphiarthrosis and diarthrosis, respectively.

multiaxial j. Ball-and-socket joint.

pivot j. A joint that permits rotation of a bone, the joint being formed by a pivot-like process that turns within a ring, or by a ringlike structure that turns on a pivot. SYN: *rotary joint*; *trochoid joint*.

plane j. A synovial joint between bone surfaces, in which only gliding movements are possible.

j. play 1. The motions of sliding, rolling, spinning, or compressing that occur between bony surfaces within a joint when the bones move through ranges of motion. 2. The distensibility or "give" of the joint capsule and ligaments that allows motion to occur between bony partners within a joint.

polyaxial j. Ball-and-socket joint.

j. protection A technique for minimizing stress on joints, including proper body mechanics and the avoidance of continuous weight-bearing or deforming postures.

receptive j. Saddle joint.

rotary j. Pivot joint.

sacroiliac j. The articulation between the sacrum and the ilium of the hip bone. Joint movement is limited because of interlocking of the articular surfaces.

saddle j. A joint in which the opposing surfaces are reciprocally concavoconvex. SYN: *receptive joint*.

shoulder j. The ball-and-socket joint between the head of the humerus and the glenoid cavity of the scapula.

simple j. A joint composed of two bones.

spheroid j. A multiaxial joint with spheroid surfaces.

sternoclavicular j. The joint space between the sternum and the medial extremity of the clavicle.

stiff j. A joint with reduced mobility.

subtalar j. The three articular surfaces on the inferior surface of the talus.

sutural j. An articulation between two cranial or facial bones.

synarthrodial j. Synarthrosis.

synovial j. A joint in which the articulating surfaces are separated by synovial fluid. SEE: *joint* for illus.

tarsometatarsal j. A joint composed of three arthrodial joints, the bones of which articulate with the bases of the metatarsal bones.

temporomandibular j. Craniomandibular joints.

trochoid j. Pivot joint.

ulnomeniscal-triquetral j. The functional articulation of the distal ulna, articular disk, and triquetrum. The disk may subluxate following injury or with arthritis and block supination of the forearm.

uniaxial j. A joint moving on a single axis.

unilocular j. A joint with a single cavity.

Joint Commission on Accreditation for Healthcare Organizations, The Joint Commission ABBR: JCAHO. Group that oversees and establishes standards of quality and performance measurement in health care and annually publishes the Accreditation Manual for Hospitals.

Jones criteria (jōnz) [T. D. Jones, U.S. physician, 1899–1954] The criteria for diagnosis of acute rheumatic fever. SEE: *rheumatic fever*.

Jones fracture A transverse fracture of the proximal diaphysis, approx. $\frac{3}{4}$ in from the base of the fifth metatarsal. This fracture is commonly confused with an avulsion fracture of the styloid process of the fifth metatarsal. The distinction is important because the true Jones fracture often results in a nonunion if the fracture is not properly identified and managed.

Joubert syndrome (zhoo-bēr') A rare, autosomal-recessive neurological disorder, marked by failure of development of the vermis cerebelli and by improper formation of the brainstem and medulla.

SYMPTOMS: Common symptoms include mental retardation, ataxia, disordered breathing, abnormal eye movements, and decreased muscle tone.

joule (jül) [James Prescott Joule, Brit. physicist, 1818–1889] ABBR: J. The work done in one second by a current of one ampere against a resistance of one ohm. One kilogram calorie (kcal or Calorie) is equal to 4185.5 J. One calorie (small calorie) equals 4.1855 J.

journaling (jūr'näl-ng) [O.Fr. *journal*, daily] Keeping a diary or journal as a means of self-exploration, stress reduction, or enlightenment. Studies have shown that journaling can help relieve symptoms of disease such as asthma, rheumatoid arthritis, and diabetes. It has also been found to improve socialization and relieve depression in seniors who are in journaling workshops with others.

JRA *juvenile rheumatoid arthritis.*

JRCDCMS *Joint Review Committee for Diagnostic Medical Sonography.*

JRCERT *Joint Review Committee on Education in Radiologic Technology.*

JRCRTE *Joint Review Committee for Respiratory Therapy Education.*

judgment The use of available evidence or facts to formulate a rational opinion or to make socially acceptable choices or decisions. Judgment may be impaired by conditions such as mental illness, medications, delirium, fatigue, or bias.

substituted j. Instructions regarding patients' wishes from significant others, usually with respect to their preferences for life support, drug therapy, fluid infusions, or supplemental nutrition. Substituted judgments are relied upon when patients are unable to advocate for themselves, and are generally respected by health care workers, but their validity in representing the actual desires of patients has been questioned.

Judgment of Line Orientation Test
ABBR: JLO. A neuropsychiatric test to assess visual/spatial orientation. The full test consists of 30 items (a shorter version consists of 15).

judgment sample A research cohort whose members are chosen because they share a common set of qualities. Because of the selection criteria used in assembling the group, the judgment sample is not random, and the conclusions drawn from research on such a sample do not have broad applicability to the larger community.

jugal (jū'gāl) [L. *jugalis*, of a yoke]

1. Connected or united as by a yoke.

2. Pert. to the malar or zygomatic bone.

jugular (jūg'ū-lār) [L. *jugularis*] 1. Pert. to the throat. 2. Pert. to a jugular vein.

3. A jugular vein.

j. vein Any of the two pairs of bilateral veins that return blood to the heart from the head and neck. The external jugular vein receives the blood from the exterior of the cranium and the deep parts of the face. It lies superficial to the sternocleidomastoid muscle as it passes down the neck to join the subclavian vein. The internal jugular vein receives blood from the brain and superficial parts of the face and neck. It is directly continuous with the transverse sinus, accompanying the internal carotid artery as it passes down the neck, and joins with the subclavian vein to form the innominate vein. The jugular veins are more prominent during expiration than during inspiration and are also prominent during cardiac decompression.

When the patient is sitting or in a semirecumbent position, the height of the jugular veins and their pulsations can provide an accurate estimation of central venous pressure and give important

information about cardiac compensation.

jugulate (jūg'ū-lāt) [L. *jugulare*, to cut the throat] To quickly arrest a process or disease by therapeutic measures.

jugulation (jūg'ū-lā'shūn) The sudden arrest of a disease by therapeutic means.

jugum (jū'gūm) *pl. juga* [L., a yoke] 1. A ridge or furrow connecting two points. 2. A type of forceps.

j. penis A forceps for temporarily compressing the penis.

j. petrosus An eminence on the petrous section of the temporal bone showing the position of the superior semicircular canal. SEE: *arcuate eminence.*

juice [L. *jus*, broth] Liquid excreted, secreted, or expressed from any part of an organism.

fruit j. The liquid expressed when fruit is compressed. Fruit juice contains water, vitamin C, sugars, pulp, minerals such as calcium, and varying amounts of acid and other biologically active chemicals.

gastric j. The digestive secretion of the gastric glands of the stomach. It is a thin, colorless fluid; is mostly water; and contains mucus, intrinsic factor, hydrochloric acid, the enzyme pepsin, and the enzyme lipase. The pH is 1–2, strongly acidic, which destroys pathogens and changes pepsinogen to the active pepsin. Pepsin begins the digestion of proteins. Gastric lipase has little effect on unemulsified fats; most fat digestion takes place in the small intestine. The amount of gastric juice secreted in 24 hr varies with food intake. SEE: *stomach.*

grapefruit j. A drink derived from a fruit rich in chemicals called flavonoids, which impair the metabolism of drugs processed by the liver's cytochrome P 450 system. Patients should be advised that the juice alters the performance of several important drugs, including warfarin, steroids, calcium channel blockers, statins, second-generation antihistamines, protease inhibitors, and others.

intestinal j. Alkaline secretion that contains peptidases and enzymes to complete the digestion of disaccharides. SEE: *digestion.*

pancreatic j. SEE: *pancreatic juice.*

juicing (joo'sing) The conversion of vegetables and fruits into consumable liquids.

Julian date (jool'yān) [Julius Caesar, Roman general, ca 44 B.C., who devised the Julian calendar] In medical records, identifying a calendar date by using a code for the day of the year. Each day is numbered sequentially from 1 through 365, or 366 on leap years.

Jumping Frenchmen of Maine A condition characterized by a sudden, single, sometimes violent movement or cry that

occurs in response to a sharp, unexpected sound or touch. The individual may also blurt out whatever was being thought of at the time of the stimulus. The condition may begin in childhood and be lifelong. It has been most frequently described in persons of French descent living in Maine, but may occur in a person of almost any nationality or geographic location. The cause is unknown and there is no effective therapy. SEE: *Tourette's syndrome*; *miryachit*; *startle syndrome*.

jun (joon) A family of oncogenes that can transform some normal cells (e.g., rat embryo cells) into cancer cells. All members of this family can bind to activating protein-1 (AP-1) sites and to specific DNA sequences. SEE: *oncogene*; *transformation*.

junction (jünk'shün) [L. *unctio*, a joining] The place of union or coming together of two parts or tissue layers.

amelodentinal j. Dentinoenamel junction.

atrioventricular j. The area of cardiac conduction pathway connecting the AV node with the atrioventricular bundle.

cementodentinal j. The interface of dentin and cementum of the tooth. SYN: *dentinoceamental junction*.

cementoenamel j. The line around the tooth that marks the boundary between the crown and root of the tooth; the interface between enamel and cementum.

costochondral j. The articulation or meeting place of the bony rib and its costal cartilage.

dentinoceamental j. Cementodentinal junction.

dentinoenamel j. The plane or interface between the dentin of the tooth and the enamel crown; histological sections show it to be a scalloped boundary at the site of the basement membrane which separated the cell layers that formed the calcified enamel and dentin. SYN: *amelodentinal junction*.

dentogingival j. The interface and zone of attachment between the gingiva and enamel or cementum of the tooth. It holds in place the junctional or attachment epithelium.

liquid j. The point in a potentiometric reference electrode measurement system at which the reference solution makes contact with the test solution. An example is pH reference electrode.

mucocutaneous j. The junction between the skin and a mucous membrane.

mucogingival j. A scalloped, indistinct boundary between the gingiva and the oral mucosa on the alveolar process. The coral color of gingiva may be contrasted with the more vascular oral mucosa. Also called the mucogingival line.

myoneural j. The axon terminal of a

motor neuron, synaptic cleft, and sarcolemma of a muscle cell. SYN: *neuromuscular junction*. SEE: *illus*.

neuromuscular j. Myoneural junction.

sclerocorneal j. The meeting point between the sclera and the cornea marked on the external surface of the eyeball by the outer scleral sulcus.

squamocolumnar j. 1. The point in the cervical canal at which the squamous and columnar epithelia meet. As most cervical cancers begin in this area, it is important to obtain cells from this location for the Pap test. 2. The point above the lower esophageal sphincter where the squamous epithelium of the esophagus and the columnar epithelium of the stomach meet. SYN: *transition zone*. SEE: *illus*.

tight j. A part of the junctional complex at the lateral interface between epithelial cells; also called zonula occludens.

Jung, Carl Gustav (yüng) [Swiss psychiatrist, 1875–1961] The founder of a school of analytic psychology. In his early career, Jung was associated with Sigmund Freud. Later he proposed his own theory of the unconscious mind, based on his belief that all human beings share common myths and symbols. This concept has not been objectively validated.

juniper tar (joo'nĩ-pěr) A volatile oil obtained from the wood of *Juniperus oxycedrus*. It is used in shampoos and bath emulsions.

junk DNA (jüngk) A sequence of base pairs of DNA that does not code for a gene or have a recognizable function.

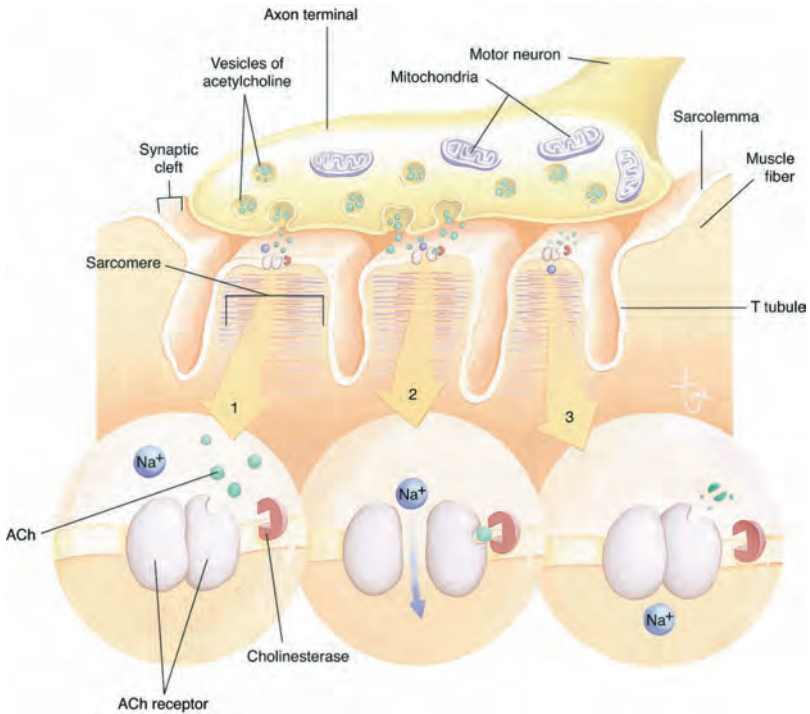
jurisdiction The authority and power of courts to hear and render judgments on the parties and subject matter of a case.

jurisprudence (joo'is-proo'dens) [L. *juris prudentia*, knowledge of law] The scientific study or application of the principles of law and justice.

dental j. The application of the principles of law as they relate to the practice of dentistry, to the obligations of the practitioners to their patients, and to the relations of dentists to each other and to society in general. This term and forensic dentistry are sometimes used as synonyms, but some authorities consider the first as a branch of law and the second as a branch of dentistry.

medical j. The application of the principles of law as they relate to the practice of medicine, to the obligations of the practitioners to their patients, and to the relations of physicians to each other and to society in general.

nursing j. The application of the principles of law as they relate to the practice of nursing, to the obligations of nurses to their patients, and to the re-



MYONEURAL JUNCTION

lations of nurses with each other and with other health care professionals.

jury-mast (jūr'ē-māst) [L. *jurare*, to be right, + *AS. masc*, a stick] An apparatus for support of the head in diseases of the spine.

Juster's reflex (jūs'trz, zhūs-tāz') [Emile Juster, 20th century Fr. neurologist] Finger extension instead of flexion when the palm of the hand is irritated.

justo major (jūs'tō mā'jor) [L.] Bigger than normal, as a pelvis.

justo minor (jūs'tō mī'nor) [L.] Smaller than normal, as a pelvis.

juvenile (jū've-nīl") [L. *juvenis*, young]
1. Pert. to youth or childhood. **2.** Young; immature.

juvenile hemochromatosis ABBR: JH. An autosomal recessive disorder of iron metabolism in which excessive iron storage results in hypogonadism, cardiomyopathy, cirrhosis, and joint disease in individuals before the age of 30. Patients with juvenile hemochromatosis do not have mutations in the HFE protein, the protein responsible for hemochromatosis in adults. The mutation in juvenile hemochromatosis is found on chromosome 1.

juxta- [L., near] Prefix indicating proximity.

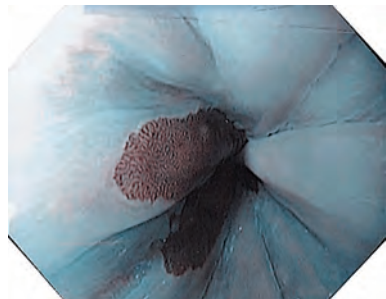
juxta-articular (jüks'tā-ār-tīk'ū-lār) ["

+ *articulus*, joint] Situated close to a joint.

juxtaglomerular (jüks'tā-glō-mēr'ū-lār) ["] + *glomus*, ball] Near or adjacent to a glomerulus.

juxtaglomerular apparatus The juxtaglomerular cells of the afferent arteriole and the macula densa of the distal tubule. This structure initiates the renin-angiotensin mechanism to elevate blood pressure and increase sodium retention.

juxtaposition (jüks'tā-pō-zī'shūn) ["] + *positio*, place] Apposition.



SQUAMOCOLUMNAR JUNCTION

Squamocolumnar junction of the distal esophagus (seen endoscopically)