## Chronic & Acute Pain Terms

The Pain Dictionary includes definitions sourced from a variety of online resources. These terms are meant to educate pain patients. This dictionary of terms includes definitions sourced from a variety of online resources, including the <u>Cleveland Clinic Foundation</u>, <u>Mayo Clinic</u>, California Hospital Medical Center, Rush University Medical Center, Texas Spine and Sports Therapy Center and the National Pain Education Council.

**Abstinence syndrome** – The symptoms experienced by a person who interrupts or ends chronic administration of a drug; may include hallucinations, sweating, diarrhea, nausea, seizures or other symptoms. The exact symptoms or combination thereof will vary from individual to individual depending on the substance and the length of time required for the body to purge the chemical.

**Arcuplasty** – A cement augmentation procedure designed to eliminate pain in patients with vertebral fractures. Instruments access the injured bone by way of a 3-millimeter incision in the body of vertebra and an arc-shaped osteotome is established. Following the expansion and preparation of the cavity, it is then slowly filled with cement to re-establish the bone's original shape. The cement cures in a few minutes and the procedure is usually not a lengthy one.

**Activation** – The firing of a neuron, also called an action potential or nerve impulse.

**Acupuncture** – The practice of piercing the skin with very fine needles according to traditional Chinese medicine techniques. The desired results range from pain relief and the treatment of illnesses to therapeutic benefits.

**Acute pain** – An intensely unpleasant sensation associated with a serious medical condition caused by issues such as infections or injuries. Pain is perceived when receptor nerve cells near the skin or organs where the condition has occurred send messages to the spinal cord, and then to the brain, via the nervous system.

**Addiction** – Identified as compulsive, chronic drug use despite real and potential danger to oneself and to others. Cravings, tolerance (gradually requiring a higher dose in order to produce the same effect) and withdrawal are all symptoms. Addiction is classified as a neurobiological disease.

**Adjuvant analgesic** – A medication not primarily intended to be a painkiller (analgesic) but that does alleviate some degree of pain.

**Agonists** – Agonists are substances that bind to cell receptors, prompting a physical response. An agonist often mimics a naturally occurring chemical.

**Algogenic** – Inciting pain.

**Allodynia** – Pain felt after being stimulated, which under usual circumstances is not paincausing.

**Analgesia** – Insensibility to pain in response to something that would normally cause pain.

**Analgesics** – Medications whose primary purpose is to relieve pain.

**Analgesic ceiling** – The greatest dosage of an analgesic administered at which point no further pain relief is achieved.

**Anesthesia** – The loss of sensation resulting from the administration of an agent that inhibits pain impulses from reaching the brain.

**Ankylosing spondylitis** – An arthritis involving the inflammation of the spine, sacroiliac joints and occasionally the hips and shoulders. Flexibility is greatly reduced, and in the worst cases, an individual's vertebrae become fused.

**Antagonists** – A class of drugs designed to competitively bind to cell receptors, thus preventing agonists from binding.

**Antidepressant** – An agent administered to provide some level of relief to individuals suffering from depressive disorders.

**Antiemetics** – Drugs taken to eliminate or prevent vomiting and nausea.

**Antiepileptic Drug (AED)** – A pharmaceutical intended to inhibit the occurrence of seizures; also called an anticonvulsant.

**Arachnoiditis** – The condition of the arachnoid membrane becoming inflamed. The duramater (outermost), the arachnoid (middle), and the piamater (innermost) are the three membranes that cover and protect the spinal cord and brain.

**Arthritis** – A disease in which one or more joints become inflamed and the individual experiences stiffness or even pain.

**Behavioral therapy or behavioral modification** – A therapy to help patients cope with situations by eliminating negative behaviors and reinforcing positive ones. Unlike other forms of psychotherapy, behavioral therapy treats only the behaviors themselves and does not acknowledge the psychological issues behind them.

Beta-blockers – Medications used to treat and manage arrhythmias and hypertension by blocking the effects of epinephrine (adrenaline) and other stress hormones in the body.

Bioavailability – The rate and extent to which a substance enters the circulation system.

Biofeedback – A technique involving training a person how to use the mind to control the body. Bodily functions are measured in real-time using electrodes so the person is conscious of his or her physiological responses. A practitioner then works with the person to bring certain functions to an acceptable rate or level.

**Biopsychosocial** – Relating to the biological, psychological and social parts of a patient, particularly in consideration to his or her condition and treatment, rather than just considering the biomedical aspects.

**Board-certification in Pain Medicine** – A certification awarded by the American Board of Anesthesiology and earned by physicians who have completed a one-year fellowship approved by the American Board of Medical Specialties; officially, the Certificate of Additional Qualifications in Pain Medicine, an ABMS Member Board General and Subspecialty Certificate. **Botulinum toxin type A (Botox)** – A purified botulinum toxic, known more commonly by its brand name Botox, used via injection to relax muscles, for example to minimize wrinkles, treat certain eye conditions, reduce excessive perspiration and prevent migraines.

**Buprenorphine** – Used to treat opioid (narcotic) dependence or addiction, and to treat moderate to severe pain. It can be taken intravenously, orally or transdermally.

**Breakthrough pain** – Discomfort that overwhelms any pain relief already being delivered by analgesics.

**Complementary and Alternative Medicine (CAM)** – Medical techniques that are not considered within the boundaries of conventional medicine in the United States.

**Capsaicin** – An irritant phenolic amide found in various chili peppers that makes them hot. The burning sensation capsaicin creates when it makes contact with the skin is believed to inhibit cell-to-cell transmission of pain messages.

**Cauda equina syndrome** – The spinal cord ends in the lumbar area and continues through the vertebral canal as spinal nerves. Because of its resemblance to a horse's tail, the collection of these nerves at the end of the spinal cord is called the cauda equina. These nerves send and receive messages to and from the lower limbs and pelvic organs.

**Causalgia** – An abnormal burning pain and sensitivity to touch resulting from damage to a peripheral nerve; a type of complex regional pain syndrome.

**Celiac plexus** – A network of nerve fibers in the abdomen responsible for conducting all pain sensation for the internal organs located there, including the pancreas, spleen, stomach and liver.

**Central nervous system (CNS)** – In vertebrates, the spinal cord and the brain. The CNS plays a major role in the control of behavior and communication among all organs and other parts of the body via the entire nervous system.

**Central pain** – Pain initiated or sensed in the central nervous system as a result of injury. **Central sensitization** – Increased excitability of central nervous system neurons, due to an injury or other damage, which then become hyper-responsive to all subsequent stimuli. **Cerebral cortex** – The convoluted surface layer of the brain, which includes the sensory, motor and association cortices.

Cervical spine – The portion of the spine closest to the skull; vertebrae C1-C7.

**Chronic non-cancer pain (CNCP)** – Enduring pain not associated with cancer.

**Chronic non-malignant pain (CNMP)** – Enduring pain not attributed to cancer or other critical condition.

**Chronic pain** – Long-lasting pain.

**Chronic pain syndrome (CPS)** – Syndrome characterized by pain that continues over a long period of time.

**Continuous dysesthesia** – Symptom of a neurologic disorder in which a person continuously experiences abnormal sensations without any stimuli present.

**Controlled Substance Agreement** – A consensual promise or contract between patient and physician intended to encourage intake of opioids for strictly medical and therapeutic use.

**Corticosteroid** – A drug created to act like a naturally occurring hormone produced by the adrenal glands; frequently used as an anti-inflammatory agent as well as for hormone replacement therapy.

**COX-2** inhibitor – A nonsteroidal anti-inflammatory drug (NSAID) that restricts the cyclooxygenase-2 enzyme.

Complex regional pain syndrome (CRPS) – A syndrome consisting of the sub-syndromes reflex sympathetic dystrophy (RSD) and causalgia, also known as CRPS 1 and CRPS 2, or Type I and Type II, and characterized by chronic pain that typically affects a hand or foot (and then later spreads to the whole limb). CRPS usually develops after an injury, surgery, stroke or heart attack, but the pain is always abnormally intense for what would be expected with the initial damage, if there is initial damage at all.

**Cyclooxygenase (COX)** – Enzyme aiding in the synthesis of biological mediators called prostanoids, including prostaglandins, prostacyclin and thromboxane. Certain pharmacological

agents are designed to be COX inhibitors in order to relieve symptoms of pain and inflammation.

**Deafferentation** – The freeing of a motor nerve from sensory components due to severing of the dorsal root central from the dorsal ganglion.

**Deep somatic pain** – A type of somatic pain related to ongoing activation of nociceptors in bones, fasciae, joint capsules, tendons or muscles, characterized by aching and poorly localized pain.

**Deep tissues** – Tendons, fasciae, bone, muscle and joints.

**Dermatomes** – Cutaneous nerve networks defined by sensation; each dermatome is associated with a particular section of skin, which is served by a single spinal nerve.

**Disc** – Round-shaped piece of shock-absorbing tissue located between pairs of vertebrae; each disc has a strong outer layer and a gel-like filling.

**Discectomy** – Surgical procedure to extract the damaged portion of a herniated disc in the spine; a herniated disc occurs when the soft material inside the disc is pushed out, placing pressure on the spinal cord or spinal nerve.

**Discography/Discogram** – The injection of contrast fluid into spinal discs to locate the source of severe back pain.

**Dorsal horn (DH)** – The dorsal gray matter of the spinal cord subdivided into three laminae that play a role in the reception of sensory information from the body.

**Dorsal horn neurons** – Neurons that receive sensory information and are located in the dorsal gray matter of the spinal cord.

**Dysesthesia** – Symptom of a neurologic disorder in which a person experiences abnormal sensations without any stimuli present.

**Endogenous opioids** – Natural opioids created by metabolic synthesis in the body.

**Enkephalins** – One of three major families of opioids produced by the body.

**Epidural** – The outermost space still located within the spinal canal.

**Epidural Blood Patch** — Used to alleviate headaches after a spinal tap. In some cases, spinal fluid leaks following a spinal tap and the decrease in spinal fluid pressure causes a severe headache. The patient's blood can then be inserted at the point of the spinal tap to "patch" the leak.

**Equianalgesic** – Resulting in the same degree of analgesic effects.

**Equianalgesic dose chart** – A conversion chart to aid in converting one analgesic or method of administration to another.

**Ergotamine** – An ergopeptine and member of the ergot category of alkaloids; medically used in the treatment of cluster or migraine headaches.

**Excitatory amino acids (EAAs)** – Neurotransmitters such as glutamate and aspartate that act upon excitatory receptors in the central nervous system.

**Facet joints** – The joints situated between vertebrae; allow for the appropriate amount of rotation and flexion.

**Fellowship training** – Medical training that affords physicians an even higher level of specialization than that of a residency or internship program. Following completion of a fellowship in a subspecialty a physician is permitted to practice medicine without being directly supervised by other physicians.

**Field block injection** – Injection of a local anesthetic, sometimes in combination with a corticosteroid, into a muscle that is causing pain.

**Fibromyalgia** – A common syndrome in which a person experiences long-term pain and tenderness throughout the body, such as in muscles, joints, tendons and other fibrous or connective tissue.

**Glutamate** – An excitatory amino acid neurotransmitter largely involved in learning and memory.

**Headache** – Pain felt in the head, usually above or behind the ears or the eyes.

**Headache, cluster** – Headache that occurs in a series lasting weeks or months; may return every few years.

**Headache, rebound** – Pain experienced by analgesic-tolerant individuals after the medication's effects begin to decrease.

**Headache, sinus** – A headache caused by sinus cavity pressure, typically caused by infection. **Headache, tension** – Headache affecting both sides of the head, sometimes accompanied by a tight feeling in the neck or shoulders. The pain is mild to moderate and described as a squeezing sensation, as though the head were in a vice.

**Herniated disc** – Spinal disc whose inner material has ruptured, causing disc material to press on nearby nerves.

**Herpes zoster virus (related to shingles)** – Virus causing intensely painful blisters on the skin. Also called shingles, herpes zoster is a reactivation of the chickenpox virus.

**Hyperalgesia** – Extreme pain experienced as a result of an action or event that does not usually result in pain.

**Hyperesthesia** – Increased pain sensitivity upon encountering a stimulus that should not cause such a sensation.

**Hyperpathia** – Syndrome in which a person experiences an abnormally painful reaction as a result of a stimulus, especially a repetitive stimulus.

**Hypersensitivity Pain Disorder (HPD)** – Pain disorder which at this time is suggested, as it exhibits symptoms of neuropathic pain but does not fit the clinical definition of neuropathic pain, largely due to the limits of currently available diagnostic techniques.

**Hypoalgesia** – Diminished pain as a reaction to what should be a painful stimulus.

**Hypoesthesia** – A reduction in a person's sense of sensation.

**latrogenic** – Term to describe an adverse response to medical treatment that was caused by the treatment itself.

**Inflammation** – A pathologic mechanism for eliminating noxious agents or repairing damaged tissue. Signs include redness, swelling and pain.

**Inflammatory mediators** – The agents that initiate inflammation in reaction to damage or a threat in the body.

**Imagery** – An alternative medicine technique requiring a person to focus on memories or other mental images as a way of coping with a condition or pain.

**Intermittent claudication** – A condition marked by pain, weakness or cramps in the calf muscles, typically brought about by exercise or even walking, and disappearing after a period of rest.

Interventional pain management – A subspecialty of pain management centered on the management of pain utilizing interventional procedures or treatments, such as nerve blocks, spinal cord stimulation, peripheral nerve stimulation or the implanting of drug delivery systems. Intra-articular injection – Procedure used to treat inflammatory joint conditions, such as certain types of arthritis. A drug, most commonly a corticosteroid, is injected into the joint space; if necessary, excess fluid may also be withdrawn from the joint space using this technique.

**Intradiscal Electrothermal Therapy (IDT)** – Therapy requiring a small incision to be made in the back, through which a wire carries electrical current into a herniated disc. The electricity modifies and repairs the collagen fibers of the disc.

**Intractable pain** – Intense, unremitting pain not relieved by conventional medical or surgical procedures.

**Intrathecal** – In or into the subarachnoid or subdural space.

**IPN** – Inflammatory pain resulting from response to infection, injury or other threat to the body.

**Ischemia** – Inadequate blood flow caused by an obstruction, such as a narrowing of the arteries due to disease.

**Joint** – A location at which two or more bones meet.

**Ketamine** – A nonbarbiturate administered intravenously or intramuscularly to cause dissociative anesthesia.

**Kyphoplasty** – A method of stabilizing vertebral fractures. In the procedure, a balloon-like device is inserted into the vertebra and then injected with a filler material to aid in the spine's height and angle restoration.

**Lancinating pain** – Unpleasant shooting or stabbing sensations.

**Lidocaine** – A crystalline compound used as a local anesthetic in the treatment of pain and discomfort.

**Local anesthetic** – An anesthetic that blocks pain or movement nerve signals in a specific area of the body.

**Limbic system** – The group of brain structures which mediate emotions, behavior, long-term memory and olfaction: the amygdala, hippocampus, hypothalamus, septal nuclei and transitional cortical regions.

**Lumbar spine** – The five vertebrae making up the lower segment of the spine.

**Lumbar spondylosis** – Deformity of the lumbar spine.

**Migraine** – Headache characterized by severe pulsating pain on one side of the head that can last for several hours or days.

Migraine, menstrual – Migraine experienced during the beginning of menstruation.

**Morphine** – An addictive narcotic and the principle alkaloid of opium.

**Mu agonists** – A class of opioids targeting m1 and m2 nerve receptors in the central nervous system.

**Multimodal analgesia** – Balanced analgesia utilizing more than one modality of pain management, for example, a drug plus a nondrug to achieve additional benefits or reduce side effects.

**Nerve block** – The injection of a local anesthetic near nerves to manage pain.

**Neuroablation** – Destroying neural structures, or other tissue, responsible for causing pain in an effort to disrupt pain signals between that body area and the brain.

**Neurolysis** – Method of ablation of neural tissue involving application of heat or cold, or administration of a destructive chemical.

**Neuralgia** – Chronic pain in one or more nerves occurring without the stimulation of pain receptor cells.

Neuritis – Inflammation of nerves.

**Neuroablative therapy** – Therapy to destroy neural structures, or other tissue, responsible for causing pain in an effort to disrupt pain signals between that body area and the brain. Effects may not be permanent if the nerves are able to grow back.

**Neuropathic pain** – Pain experienced as a result of damage, disease or injury to the somatosensory system.

**Nociceptive pain** – Pain caused by stimulation of peripheral nerve fibers that respond only to a stimulus that has reached a hazardous intensity.

**Nociceptors** – Sensory receptors specially designed by the body to respond to pain-inducing or potentially damaging stimuli.

**Non-pharmacologic therapy** – A pain management approach incorporating one or more types of alternative treatment, such as relaxation techniques.

**Nonsteroidal anti-inflammatory drug (NSAID)** – Drugs that are not steroids but which are still capable of blocking the production of the chemicals responsible for inflammation; also used to treat minor pains and aches as well as fever.

**Occipital Nerve Block** – An injection of local anesthetic and a steroid to treat inflammation of the occipital nerves.

**Onset of action** – The length of time required for a drug to begin working.

**Opiate** – Drug derived from or containing opium; tends to produce sleep-inducing and pain-reducing effects.

**Opioid** – A narcotic that has the properties and effects of an opiate but which is synthetically derived from opium, rather than naturally derived.

**Opioid-Induced Hyperalgesia (OIH)** – Hyperalgesia sometimes produced by opioid use. If the patient develops a tolerance to the drug, his or her pain threshold will be lowered and perceived pain will become more severe regardless of an increase in dosage.

**Opioid, long-acting** – Drug with a half-life of many hours or which work in an extended release formulation.

**Opioid rotation** – Transitioning from one opioid to another as a pain management strategy. **Opioid, short acting** – Drug with a half-life of a few hours.

Osteoarthritis – Chronic inflammation of the joints due to erosion of the cartilage covering bones.

**Osteoporosis** – Disease characterized by a reduction in bone mineral density, causing the microarchitecture of the bone to deteriorate. The risk of fractures increases, and the rate bones can heal themselves decreases.

**Pain flares (flare ups)** – Explosive pain that may or may not emerge due to a specific inciting stimulus.

**Pain intensity scales** – Method of measurement of pain levels and other symptoms.

**Pain management** – The branch of medicine concerned with reducing pain and improving quality of life.

**Pain pump** – A device implanted in the lower abdomen to regularly supply the cerebrospinal fluid with a dose of an analgesic for the relief of pain.

**Pain scales** – Method of measurement of pain levels and other symptoms.

**Pain threshold** – The lowest amount of stimulation a person is able to detect.

**Pain tolerance level** – The highest amount of stimulation a person is able to endure.

**Palliative care (hospice)** – Medical care, typically provided around the clock, to a patient who is terminally ill or suffering from an incurable condition.

**Parenteral administration** – Intake of a drug using a method other than the gastrointestinal system.

**Paresthesia** – A sensation of pricking, tingling or creeping on the skin without any obvious cause and generally associated with injury to or irritation of the nerves.

**Patient-controlled analgesia (PCA)** – An analgesic delivery system by which a patient can administer his or her own medication, usually via control of a pump mechanism.

**Perioperative pain** – Pain relating to or occurring during or around the time of a patient's surgery.

**Peripheral neuropathy** – Disease involving damage to the nerves of the peripheral nervous system. Symptoms depend on which nerves are affected and where they are located, but can include muscle weakness, cramps and spams.

**Peripheral sensitization** – Can contribute to pain hypersensitivity in parts of the body where there is inflammation; caused by a lowered pain threshold for receptors and an increase in the rate at which they send nerve impulses to the brain and spinal cord.

**Phantom limb pain** – Unpleasant sensations after an amputation that feels to the patient as though the removed limb is still attached.

**Postherpetic Neuralgia (PHN)** – A condition that sometimes occurs immediately following shingles, when the rash subsides but the pain does not.

**Physical dependence** – A physiologic adaption to a pharmaceutical made evident when the drug's intake or accessibility is reduced; not the same as addiction.

**Physiological pain** – Pain caused by stimulation of nerve fibers that elicit a response from the thermonociceptive nervous system. Also called nociceptive pain.

**Polypharmacy** – Use of several medications by a patient; especially situations in which too many forms of a medication are being administered, or when more medications have been prescribed than are clinically needed.

**Potency** – The dose of a medication required to produce particular results.

**Preemptive analgesia** – Practice focused on minimizing short- and long-term postoperative discomfort by administering an analgesic drug prior to the operation.

**Prialt®** (**Ziconotide**) – Synthetic non-NSAID with neuroprotective properties that is used to produce analgesia in patients suffering from chronic pain.

**Primary afferent (nerve) fibers** – Sensory fibers located in the muscle spindle of a muscle fiber. Their function is to collect and transmit information about the speed at which a muscle stretch changes, a major component of keeping the body properly moving.

**Projection neurons** – Interneurons located in the dorsal horn of the spinal cord with nerve fibers that extend to the brain. Their function is to connect neurons to one another, specifically, ones that are located far apart from each other.

**Prolotherapy** – A procedure used to treat musculoskeletal pain that involves injection of an irritant along the periosteum to cause inflammation and tissue regeneration.

**Pruritus** – Itching sensation caused by irritation of the sensory nerve endings.

**Pseudoaddiction** – Behaviors focused on securing more or different types of medications exhibited by persons living with chronic pain. Pseudoaddiction is different from actual addiction in that the behaviors cease when the discomfort is effectively treated.

**Pseudo-opioid resistance** – Can be exhibited by persons who are taking an opioid analgesic for pain relief; they complain of pain greater than what they actually feel so as to not be taken off the medication or have the dose amount decreased.

**Pseudotolerance** – When a fixed dose of an opioid no longer produces its effects for a patient, caused by something other than a tolerance to the opioid.

**Psychogenic pain** – Characterized by physical symptoms, such as a pain in the chest, back or head, that have psychological, rather than physical causes.

**Psychological dependence** – A patient's need for a particular drug because of the enjoyable mental effects it produces, regardless of the physiologic benefits.

**Radiculopathy** – Compression, injury or inflammation of a spinal nerve root, causing symptoms of weakness, numbness or muscle control problems in whichever area of the body served by that particular nerve.

**Referred pain** – Pain experienced in a body part other than where the cause of the pain is located.

**Reflex sympathetic dystrophy (RSD)** – A form of complex regional pain syndrome. Symptoms include burning pain that gets worse with time and a lack of visible injury to the nerves.

**Regional anesthesia** – Anesthesia inhibiting sensory nerves in a sizable area of the body, for example, a whole appendage.

**Responsiveness** – Ability of an analgesic to satisfactorily manage a patient's pain without subjecting him or her to unwanted side effects.

**Rheumatism** – Any of the disorders causing inflamed and degenerative joints and muscles, with associated pain and stiffness.

**Rheumatoid arthritis (RA)** – Autoimmune disease causing inflammation of and pain in the joints; most frequently affects the hands.

**Sciatica (see also Radiculopathy)** – A condition marked by compression of or damage to the sciatic nerve; resulting pain follows the course of the nerve, from the low back down through the thigh to the foot.

**Scoliosis** – A side to side curving of the spine due to congenital malformation, disorder, injury or other damage.

**Selective serotonin reuptake inhibitors (SSRIs)** – Antidepressant medications improving a patient's mood by increasing serotonin availability in the brain.

**Shingles** – Condition occurring in a person who has previously had the chickenpox, as shingles is a reactivation of that same virus. Symptoms include burning pain, a rash, inflammation and blisters of the skin, typically on one side.

**Sicca syndrome** – An autoimmune disease combining three conditions: dry mouth, dry eyes and rheumatoid arthritis or other connective tissue disease, such as lupus or polymyositis.

**Sjögren syndrome** – see Sicca syndrome (above).

**Somatic pain** – Pain in tissues of body parts other than the organs; for example, in the skin, muscles, tendons, fasciae and bones.

**Spinal cord stimulator** – Used to treat neuropathic pain, an electrical current stimulates the spinal cord to produce a tingling sensation an block pain sensations.

**Spinal stenosis** – A narrowing of the spinal canal, placing pressure of the spinal nerve cord, causing pain and other complications.

**Spondylitis** – Group of chronic diseases targeting the spine as inflammatory arthritis.

**Spinothalamic tract (STT)** – A key pathway originating in the spinal cord and carrying nociceptive data to the thalamus.

**Stellate ganglion block** – A nerve block performed at the stellate ganglion to alleviate pain being produced by an overactive sympathetic nervous system. The injection of the local anesthetic blocks the sympathetic nerves without blocking sensory pathways.

"Stress hormone" response – A number of responses the body employs when encountering acute damage or serious stressor, resulting in lifesaving functions like fight-or-flight, blood clotting, an increase in metabolic rate and others.

**Spinal fusion** – The stabilization of a vertebra (or vertebrae)that is herniated or otherwise damaged by surgically fusing it to an adjacent vertebra.

**Spondyloarthropathy** – A joint disease affecting the vertebral column.

**Spondylolisthesis** – Condition in which a lower lumbar vertebra slips forward.

**Substance P** – A neuropeptide consisting of 11 amino acid residues and that increases contraction of gastrointestinal smooth muscle, causes vasodilation and is a sensory neurotransmitter.

**Superficial (cutaneous) somatic pain** – Type of somatic pain associated with continuous excitation of nociceptors in the skin, mucous membranes or subcutaneous tissue.

**Sympathetic (nervous system) hyperactivity** – Over-arousal of the sympathetic nervous system, characterized by an increased respiratory rate and muscle tension, as well as dilated pupils, vomiting and sweating.

**Sympathetic nerve block** – Nerve block performed near a sympathetic nerve; involves an injection of anesthetic.

[av\_heading heading='T' tag='h2' color=" custom\_font=" style='blockquote modern-quote modern-centered' size=" subheading\_active=" subheading\_size='15' padding='10'][/av\_heading]

**Temporomandibular Joint (TMJ) Disorder** – Disorder causing pain and dysfunction in the lower jaw joint and jaw muscles.

**Thalamus** – The section of brain responsible for relating impulses from the sensory nerves.

**Therapeutic dependence** – A patient's search for more analgesics out of the desire to insure a higher level of comfort.

**Thermonociceptive** – Sensitivity to pain caused by exposure to heat.

**Tolerance** – A reduction in sensitivity to the effects of a drug during a long-term treatment.

**Topical agents** – Medication administered directly to the skin.

**Transcutaneous Electrical Nerve Stimulation (TENS)** – Procedure which blocks pain with low-intensity electrical impulses in the area of the pain.

**Transdermal** – Medical treatment absorbed through the skin.

**Tricyclic antidepressants (TCAs)** – Although largely replaced by SSRIs, TCAs were the most popular antidepressant for many years and are sometimes prescribed for severe depression that does not respond to SSRI medications. TCAs increase the effectiveness of serotonin and norepinephrine to treat depression, as well as other disorders, including chronic pain and tension headaches.

**Trigger point injection** – Local anesthetic is supplied directly to a painful or injured muscle to cause to induce muscle relaxation and healing.

**Trigger zone/point** – Irritable area in a muscle that is often painful to the touch. Can also be associated with muscle or body pain far from trigger point.

**Triptans** – Drugs treating pain and other symptoms of migraine and cluster headaches.

**Vertebrae** – Bones collectively making up the spine.

**Vertebroplasty** – Pain-reducing procedure at the site of a vertebra fracture. Bone cement is injected into the fracture to stabilize the bone.

**Wind-up pain** – The increased sensation of pain from continuous activation of the pain transmitters in the same area of the body.

**Withdrawal** – Symptoms resulting from a chemically-dependent person rapidly halting the use of a medication or drug.

**Ziconotide** – Used to treat severe chronic pain, Ziconotide is a calcium channel blocker injected into the spinal fluid.