

Pain Definitions

Algology.

The science and study of pain phenomena. An algologist is a student, investigator, or practitioner of algology.

Allodynia.

Pain due to a stimulus that does not normally provoke pain.

This derived from the Greek "allo" meaning "other" and "odyne," meaning pain. The original definition adopted by the IASP committee was "pain due to non-noxious stimulus to the normal skin." The latest definition omits the words "to normal skin" in order to remove implication that allodynia applies only to referred pain. The present definition also omits "non-noxious" because a stimulus may be noxious at some times and not at others, (e.g., intact skin vs. sunburned skin) and also because the boundary of noxious stimulation may be hard to delimit. It is best to define allodynia in terms of the response to clinical stimuli. The normal response to the stimulus can always be tested elsewhere in the body, usually in a corresponding part. Note that allodynia involves a change in the quality of a sensation, whether tactile, thermal, or of any other sort. The original response to a stimulus was not pain, but the present response is. There is thus a loss of specificity of a sensory modality. In contrast, hyperalgesia represents an augmented response in a specific mode such as pain. With other cutaneous modalities, hyperesthesia is the term that corresponds to hyperalgesia, and as with hyperalgesia, sensory quality is unaltered. In allodynia the stimulus mode and the response mode differ but not with hyperalgesia.

Analgesia.

Absence of pain in response to stimulation that would normally be painful. In common parlance, health science professionals often use this term to mean hypoalgesia, a reduction in the intensity of pain that occurs in response to a normally painful stimulus. Equating the term analgesia with clinical pain relief leads to conceptual confusion. One can relieve a patient's pain without necessarily altering his/her ability to feel a normally painful stimulus.

Anesthesia.

Absence of all sensory modalities.

Anesthetic.

Agent/agents that produce regional anesthesia (i.e., in one part of the body) or general anesthesia (loss of consciousness).

Anesthesia Dolorosa.

Pain in an area or region that is anesthetic.

Angina.

Derived from the Latin term "angor" for strangling. Usually employed for pain syndromes associated with cardiac disease and indicates a feeling of oppression or tightness of the throat.

Arthralgia.

Pain in a joint, usually due to arthritis or arthropathy.

Causalgia.

A syndrome of sustained burning pain, allodynia, and hyperpathia after a traumatic nerve lesion, often combined with vasomotor and sudomotor dysfunction and later trophic changes.

Central Pain.

Pain associated with a lesion of the central nervous system.

Deafferentation Pain.

Pain due to loss of sensory input into the central nervous system, as occurs with avulsion of the brachial plexus or other types of lesions of peripheral nerves or due to pathology of the central nervous system.

Dermatome.

The sensory segmental supply to the skin and subcutaneous tissue.

Dysesthesia.

An unpleasant abnormal sensation, whether spontaneous or evoked. Compare this term with pain and with paresthesia. Special cases of dysesthesia include hyperalgesia and allodynia. A dysesthesia should always be unpleasant and a paresthesia not, although difficulties can emerge when a patient must decide whether a sensation is pleasant or unpleasant. One should always specify whether the sensations are spontaneous or evoked.

Hyperesthesia.

Increased sensitivity to stimulation, excluding special senses.

Hyperalgesia.

An increased response to a stimulus that is normally painful. Please note two considerations. One is the absence of the word noxious in the definition, because of difficulties in its use. The second is the inclusion of some features of allodynia in the definition. Many cases of hyperalgesia have features of allodynia. The term allodynia pertains when there is not an increased response to a stimulus that normally provokes pain. However, when there is also a response of increased pain to a stimulus that normally is painful, hyperalgesia is the appropriate word. With allodynia the stimulus and the response are in different modes, whereas with hyperalgesia they are in the same mode.

Hyperpathia.

A painful syndrome, characterized by increased reaction to a stimulus, especially a repetitive stimulus, as well as an increased threshold. Hyperpathia may occur with hyperesthesia, hyperalgesia, or dysesthesia. Faulty identification and localization of the stimulus, delay, radiating sensation, and after-sensation may occur. The pain is often explosive in character.

Hypoalgesia.

Diminished sensitivity to noxious stimulation.

Hypoesthesia.

Diminished sensitivity to stimulation, excluding special senses.

Neuralgia.

Pain in distribution of nerve or nerves.

Neuritis.

Inflammation of a nerve or nerves.

Neuropathic Pain.

Any pain syndrome in which the predominating mechanism is a site of aberrant somatosensory processing in the peripheral or central nervous system. Some clinical neuroscientists restrict this definition to pain originating in peripheral nerves and nerve roots.

Neuropathy.

A disturbance of function or pathologic change in a nerve; in one nerve, mononeuropathy; in several nerves, mononeuropathy multiplex; if symmetrical and bilateral, polyneuropathy. Although neuritis has been used interchangeably with neuralgia and neuropathy in the past, it is not reserved for inflammatory process affecting nerves. Neuropathy does not cover cases like neurapraxia or neurotmesis.

Nociceptor.

A receptor preferentially sensitive to a noxious stimulus or to a stimulus that would become noxious if prolonged. One should avoid use of terms like pain receptor, pain pathway, etc because they reflect anachronistic concepts and can mislead. Pain is a complex perception that takes place only at higher levels of the central nervous system.

Noxious Stimulus.

A noxious stimulus is one that is potentially or actually damaging to body tissue. In the true Sherringtonian sense, a noxious stimulus is defined as "one of intensity and quality which are adequate to trigger a nociceptive reaction of an animal, including the feeling of pain in humans." In some instances there is no lasting tissue damage (e.g., muscle pain due to excessive exercise).

Pain.

An unpleasant sensory or emotional experience which we primarily associate with tissue damage or describe in terms of tissue damage, or both. This is the formal IASP definition.

Pain Threshold.

The least experience of pain that a subject can recognize. Traditionally the pain threshold is the least stimulus intensity at which a subject perceives pain in a laboratory experiment. In psychophysics, a threshold is defined as the level at which 50% of stimuli are recognized. Thus, the pain threshold is the level at which 50% of stimuli are recognized as painful. Properly defined, pain is always the experience of the patient, whereas the stimulus intensity measured by the psychophysicist is an external event. Psychophysicists classically define the threshold in terms of the stimulus, and that limits the usefulness of pain threshold for clinical application. The stimulus is not pain and cannot be a measure of pain outside the confines of psychophysical modeling.

Pain Tolerance Level.

The greatest level of pain that a subject is prepared to tolerate. Because the pain tolerance level is the subjective experience of the individual, the same considerations limit the clinical value of pain tolerance level as pain threshold.

Paresthesia.

An abnormal sensation, whether spontaneous or evoked. Compare this term with dysesthesia. The latter indicates an abnormal sensation that is unpleasant. Avoid using paresthesia to indicate spontaneous sensations and dysesthesia to refer to evoked sensations. There is a sense in which, since paresthesia refers to abnormal sensations in general, it might include dysesthesia, but the reverse is not true. Dysesthesia does not include all abnormal sensations, but only those that are unpleasant.

Radiculalgia.

Pain along the distribution of one or more sensory nerve roots.

Radiculopathy.

A disturbance of function or pathologic change in one or more nerve roots.

Radiculitis.

Inflammation of one or more nerve roots. This term does not apply unless inflammation is present.

Somatosensory.

Derived from Greek word for "body," somatosensory input refers to sensory signals from all tissues of the body including skin, viscera, muscles, and joints. However, somatic usually refers to input from body tissue other than viscera.

Suffering.

A state of emotional distress associated with events that threaten the biological and/or psychosocial integrity of the individual. Suffering often accompanies severe pain but, of course, it can occur in its absence; hence pain and suffering are phenomenologically distinct.

Trigger Point.

A hypersensitive area or site in muscle or connective tissue, usually associated with myofascial pain syndromes.



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