

TYPES OF PAIN

Acute Pain

Acute pain is a symptom that results from injury and/ or disease that causes or can cause tissue damage through infection, trauma, the progression of a metabolic disorder, or a degenerative disease. Acute pain is generally but not universally described as pain lasting less than 12 weeks (i.e., 3 months). Acute pain is typically well located and defined, depending on the type of tissue involved. Superficial (e.g., skin) pain is typically sharp and easy to locate. On the other hand, acute deep-tissue pain from muscles, joints, or viscera can be diffuse and difficult to locate.¹ Acute pain serves to protect against further tissue damage, and when tissue injury is present, pain may be maintained in order to allow time for proper tissue healing. Therefore, the symptoms can reflect the underlying pathology.

Acute pain is associated with an actual physiological event (e.g., tissue damage, infection, trauma, metabolic disorder, etc.). Because acute pain is often associated with changes in heart rate, blood pressure, and even respiratory rate, measurement of vital signs is warranted.

Chronic Pain

Chronic pain is commonly defined as persistent or recurrent pain existing for 6 months or pain that persists beyond the normal time expected for healing of injured tissue. Chronic pain follows acute pain and is also associated with structural and functional changes in the central nervous system that require multiple therapeutic approaches. Chronic pain is no longer considered a symptom, is not protective, and may even be considered a disease itself.⁴ Generally, chronic pain is associated with physical, emotional, social, and financial disability.⁵ Patients with chronic pain often report physical inactivity due to the long period of immobility, resulting in decreased muscle strength and functional capabilities, and may also exhibit signs of depression.

Somatic

Somatic pain stems from the activation of nociceptors found in most body tissues, with the exception of neural tissue, which has none. Nociceptors, labeled as pain receptors, are mainly present in tissues such as skin, muscle, tendon, ligament, and bone. Somatic pain is the most prevalent category of pain and results primarily from pathologies caused by injuries, chronic diseases, and surgical interventions (i.e., postoperative pain). It is commonly described as normal pain because the sensation felt (pain) usually matches the noxious nature of the stimulus. For example, if one touches a very hot source or surface with a finger, a severe burning pain is perceived. This is a classic example of somatic pain.

Visceral

Visceral pain results from the activation of nociceptors found in the viscera. Disease, rather than injury, is the most common cause of such pain. Visceral pain is frequently perceived as referred pain, meaning that pain is perceived at some distance from the site of the affected organ. Angina is a perfect example of referred pain. Angina, a pain originating from the heart due to poor oxygen supply, is very often perceived as a pain in the left part of the chest and sometimes in the left arm and hand. Not all viscera are sensitive to pain. For example, many diseases of the lungs, kidneys, and

liver are painless until abnormal functioning becomes severe, whereas a relatively minor lesion in viscera such as the bladder, the stomach, or the ureters can produce excruciating pain.

Neuropathic pain is subdivided into two categories: peripheral and central. 1. Peripheral Peripheral pain results from the pathologic functioning of the peripheral nervous system—namely, sensory and motor nerves (Derasari, 2003; Devor, 2006). Injury and disease to peripheral nerves are common causes of such pain. 2. Central Central pain relates to the pathologic functioning of the central nervous system—namely, the spinal cord, the medulla, the brainstem, and the brain (Derasari, 2003; Boivie, 2006). Disease is the common cause of such pain. Central pain may start almost immediately after occurrence of the malfunction, or it may be delayed for up to several years, as seen in many cases of stroke, multiple sclerosis, and Parkinson's disease. Therapeutic EPAs are frequently used to modulate peripheral pain. They are, however, seldom used to modulate central pain.

Carcinogenic pain, or cancer-related pain, is caused by the presence of cancerous pathology (nonmalignant or malignant tumor) anywhere in the body (Mantyh, 2006). This pain is unique in that in addition to often being severe, the pathology underlying this pain may also have a significant impact on both the quality of life and the survival of the patient