

Types of Pain

There are many descriptions used to classify pain. Below are some of the most common:

- **Somatic pain:** felt in muscles, joints, tendons, and ligaments.
- **Visceral pain:** felt in organs, smooth muscle, body cavities, and deep inside.
- **Superficial pain:** felt in skin and mucous membranes.
- **Deep pain:** felt in tissues below skin level.
- **Vascular pain:** felt in vascular or perivascular tissue and probably accounts for the greatest percentage of migraine headache pain.
- **Neuropathic pain:** results from damage to nerve fibers.
- **Phantom pain:** occurs in the area of a body part that has been removed and usually involves some type of burning, itching, tingling, or stabbing.
- **Cancer pain:** usually due to pressure of a tumor mass on surrounding tissues.
- **Central pain:** occurs with tumors, disease, or damage to central nervous tissue. Central nervous tissue itself does not have pain fibers, but the meninges, sinuses, and vasculature do.
- **Breakthrough pain:** pain that returns between doses of opioid drugs.
- **Referred pain:** pain felt in a part of the body that is not its source. It occurs when visceral nociceptors synapse and trigger ascending cutaneous fibers that come from an area other than the damaged tissue area. The cutaneous and visceral inputs can converge onto the same second-order projection neurons in the dorsal horn of the gray matter of the spinal cord. Patterns of referred pain can be studied as there is a topographical method to the way that sensory neurons travel together to the same levels of the spinal cord. There are many examples of referred pain. Pain related to the heart such as the pain of a myocardial infarction often has referred pain to the left arm and chest. Ureteral pain from passing a kidney stone may be referred to the abdominal wall (flank region) and radiate from the back to the front and even down to the groin region. Several more examples of referred pain are seen in the image below.

Referred Pain Regions

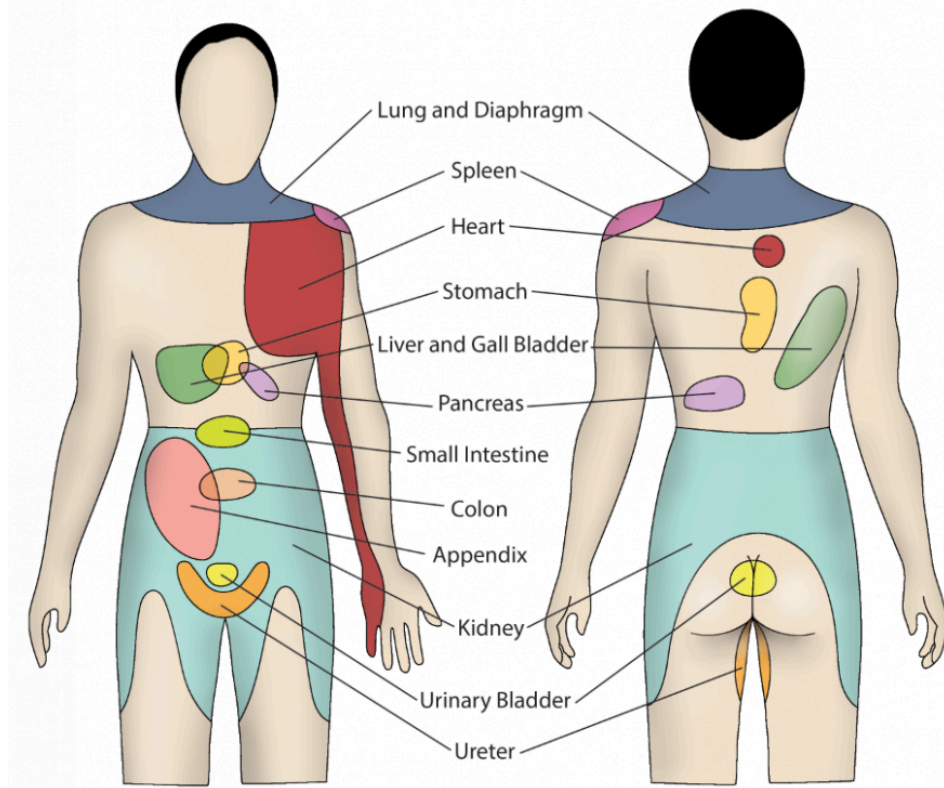


Image by Becky T BYU-Idaho W20

Pain can be classified as acute or chronic based on its characteristics. **Acute pain** has a recent onset and occurs for less than 6 months. On the other hand, **chronic pain** has a continuous or intermittent onset and has lasted for 6 months or more. Acute pain will activate the sympathetic nervous system fight or flight response to cause increased heart rate and blood pressure, pupillary dilation, and dry mouth. Acute pain is associated with adrenaline while chronic pain is more associated with chronic elevation of cortisol. Acute pain is more associated with anxiety while chronic pain is more associated with depression. Chronic pain also leads to decreased sleep, decreased libido, and appetite changes. The most common cause of chronic pain is headache. Diabetic neuropathy is a common cause of chronic neuropathic pain due to damage to peripheral nerves. It is difficult to treat.



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