

Pain: Is it an entity, provocation, or a challenge?

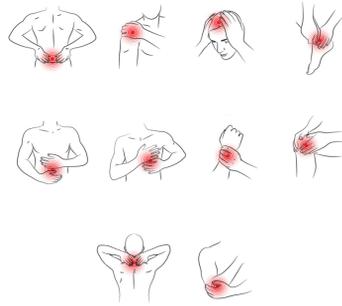
Definition

Pain is an unpleasant sensory and emotional experience with actual or potential tissue damage. It is a complicated process that is still poorly understood that how the brain interprets an injury to the body as painful.¹

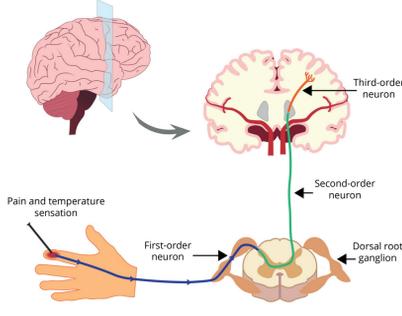


Where does the pain start?

Pain starts in the receptor nerve cells, which are observed below the skin and in the organs all over the body. When a person is unwell or injured, the neuronal receptor cells transmit messages through nerve pathways to the spinal cord and in turn to the brain.²



Transmission of pain to the brain



Adapted from Chen, Y., Abdi, S. Basic Science: Pain Mechanisms and Pathways. In: Bank, R.K. (eds) Anesthesiology In-Training Exam Review, 2022; Springer, Cham. https://doi.org/10.1007/978-3-030-87266-3_36

The medication used to reduce pain blocks these messages before they reach the brain.²

Types of pain

There is a common thought that arises in a person's mind when he/she enquires about pain, which is "what are the types of pain?"³

Based on duration:³



Acute

Pain for a shorter duration due to injury or illness (lasts for a few minutes to up to 3 months and sometimes lasts for up to 6 months)



Chronic

Pain for a longer duration either constant or intermittent (lasts for over months and even years) due to a health condition (e.g., arthritis)

Based on etiology:³



Neuropathic

Pain due to damage of nerves or other parts of the nervous system (described as shooting, stabbing, or burning pain)



Nociceptive

Pain caused by damage to body tissues (sharp, achy, or throbbing pain due to any hit, ankle twist, or stub in the toe)



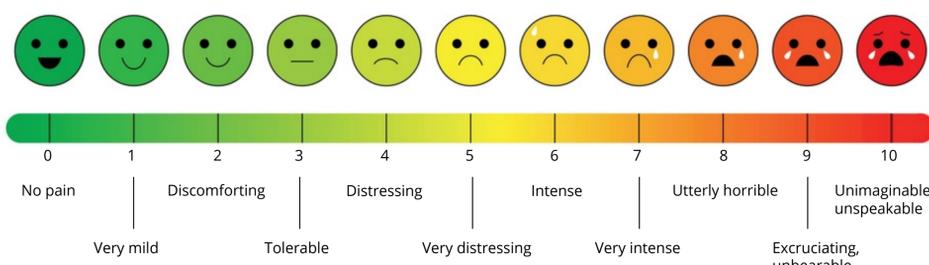
Radicular

Pain when spinal nerves get compressed or inflamed (radiating pain – lower back to hips) through the spine or nerves

Assessment of pain

Pain can be assessed based on intensity:⁴

Pain scale



Mild – Nagging, annoying, but not interfering with activities of daily living

- 1 – Very mild, just noticeable
- 2 – Minor pain. Frustrating and sometimes stronger twinges
- 3 – Evident and disturbing, however, adaptable

Moderate – Interferes significantly with activities of daily living

- 4 – Moderate pain. Extremely involved, cannot be unnoticed and disturbing
- 5 – Moderately strong pain. Unnoticeable but still can manage social activities
- 6 – Moderately strong pain. Interferes with everyday activities. Difficulty in focus

Severe – Disabling and unable to perform activities of daily living

- 7 – Dominating, restricting everyday activities, and altering relationships. Interfering sleep
- 8 – Intense physical activity is affected and communication requires great effort
- 9 – Unbearable and unable to communicate. Uncontrollable crying out or moaning
- 10 – Unspeakable, bedridden, and restless. Hardly do people experience this level of pain

There are various tools that are designed to assess the level of pain. For example, the Numerical Rating Scale (NRS), Visual Analog Scale (VAS), Wong-Baker Faces scale, Defense and Veterans Pain Rating Scale (DVPRS), Adult Non-Verbal Pain Scale (NVPS), Behavioral Pain Scale (BPS), and so on. Almost all the pain rating scales or tools rely on measuring the pain based on its intensity including mild, moderate, and severe pain.⁵

How is pain managed? Are there any specific considerations?

Pain can be managed by both pharmacological and non-pharmacological strategies. Pharmacological strategies consider the use of drugs to treat and relieve pain.⁶ Obviously, there are countless choices of medicines to treat pain, and healthcare professionals recommend a few either alone or in combination for treating pain; for example:⁷



Analgesics (OTC & NSAIDs)



Antidepressants



Topical analgesics



Anticonvulsants

Non-pharmacological strategies favor other modalities of care, especially during the modulation stage of the painful experience.⁶

Several non-medicine treatments to manage pain include:⁷



Hot or cold therapy



Physical activity



Massage



Yoga and meditation

Some other specialised or individualised treatment options include:⁷



Cognitive behavioral therapy



Acupuncture



TENS therapy (physiotherapy)

Healthcare providers can recommend patients with pain to follow any one approach or a combination of several pain management techniques.⁸



- Counselling therapy (cognitive behavioral therapy or medication)
- At-home remedies (rest or use of hot or cold bags)
- Exercise or physical activity
- Hands-on treatments (massage, acupuncture, chiropractic adjustments, and so on)
- Injections or stimulations (TENS or radiofrequency ablation)
- Lifestyle changes (healthy diet with plenty of water or fluid intake)
- Medications (pain killers or anti-inflammatory drugs)

Choosing the right pain medicine

Healthcare professionals can recommend the right choice of medicine based on:⁷

- The location, duration, intensity, and type of pain
- Any activities that ease the pain or make it worse
- The impact of pain on lifestyle and quality of life
- Other comorbid conditions and medications



Tips to patients to manage pain that cannot be easily relieved⁷



- Focus on improving daily routine activities
- Adapting to the pain and adjusting to flare-ups, if any
- Be aware of the condition and try to cope up
- Avoid unnecessary medication as they have side effects
- Try to divert concentration and find other activities that reduce pain

When to seek attention?

Do consult a healthcare professional if:⁸

- The pain worsens instead of getting better or if it returns after the treatment
- Anxiety or depression is experienced
- Sleep and quality of life are disturbed
- The pain and discomfort are interrupting the daily activities



Pain management can be quite challenging, both physically and mentally. If you are in pain, talk to your healthcare provider for a personalised pain management plan. Be open and truthful with your healthcare provider about what helps or hurts when you experience pain.⁸

NSAIDs: Non-steroidal anti-inflammatory drugs; OTC: Over the counter; TENS: Transcutaneous electrical nerve stimulation

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