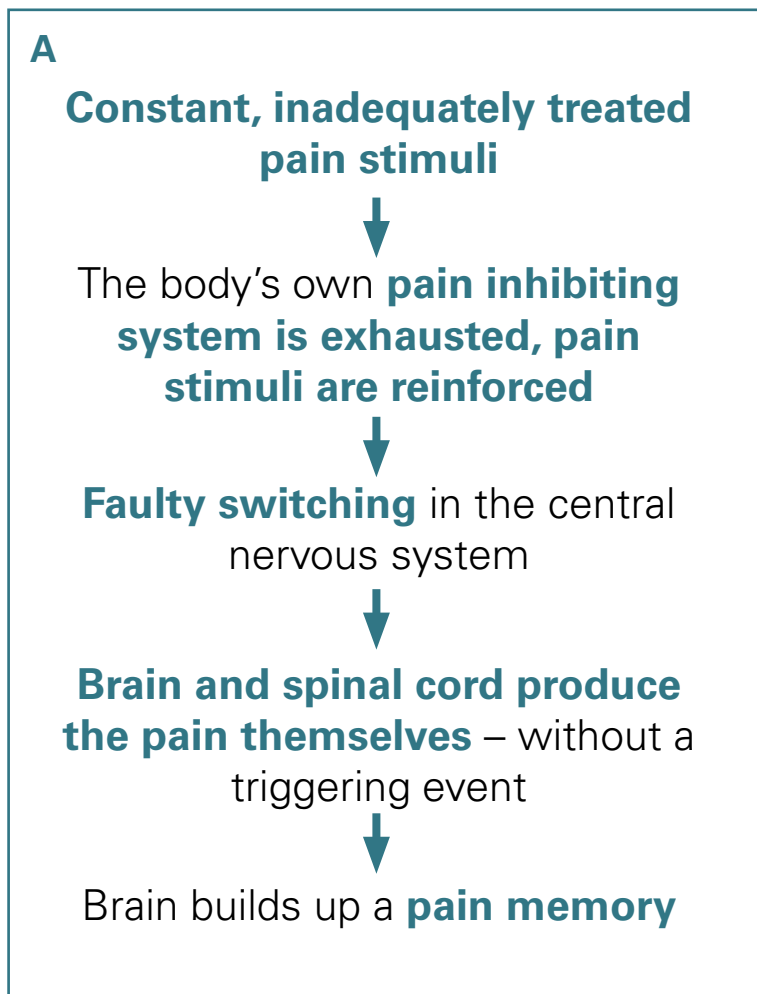


What is chronic pain? [1, 2]

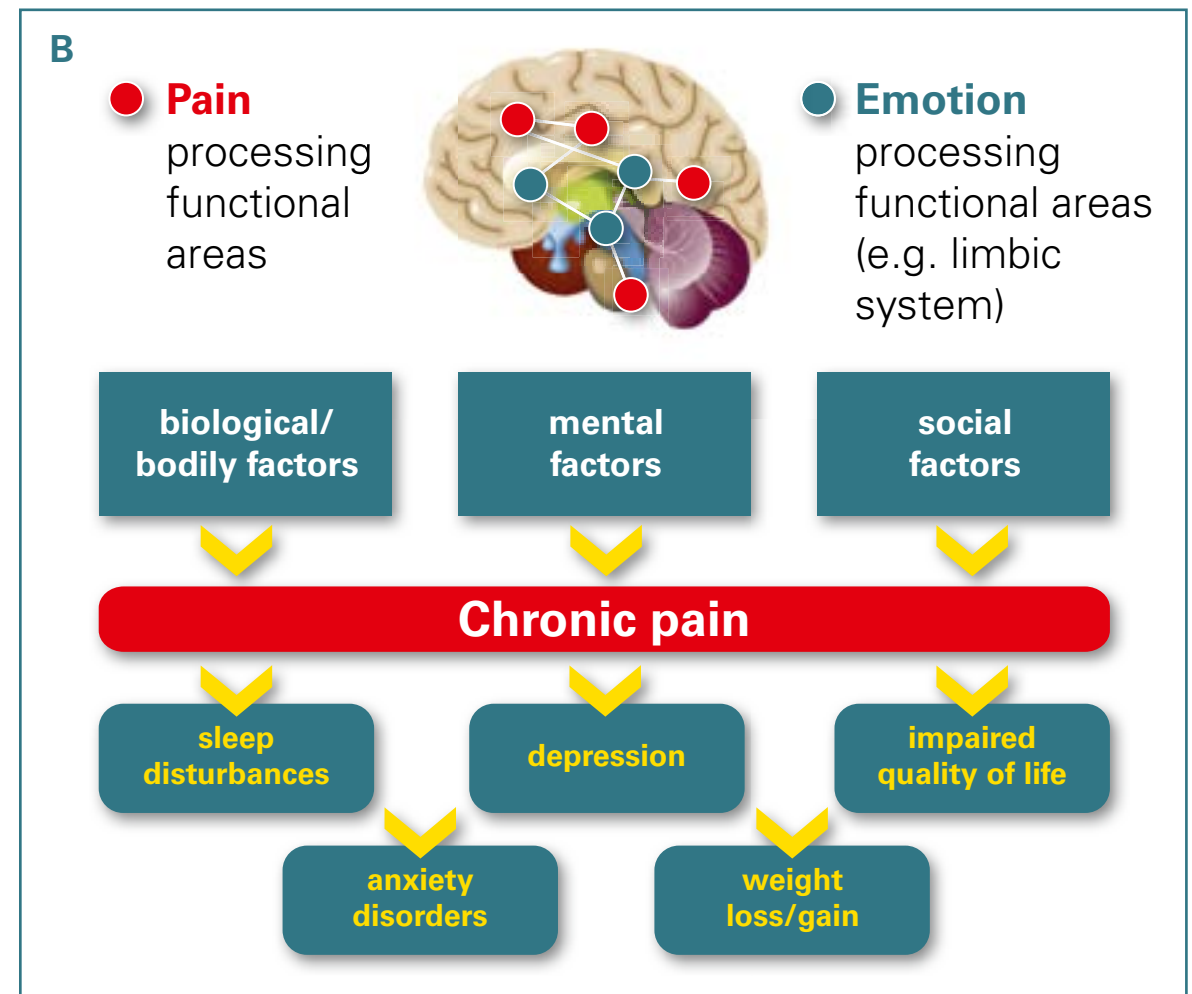
➤ **Acute pain** arises for example as a consequence of an injury or disease. It has a **warning function**. **Pain processing** in the central nervous system is **intact**.

➤ Chronic pain is a **disease in its own right**. It has **completely lost its warning function**. It is a meaningless **malfunxion of the central nervous system**.

The cause is constant pain stimuli



Mind and pain are closely linked



What is chronic pain? [1, 2]

Acute pain arises for example as a **consequence of an injury or disease**.

It has a **warning function**.

Pain processing in the central nervous system **is intact**.

Chronic pain is a disease in its own right.

It has completely lost its warning function.

It is a meaningless **malfunction of the central nervous system**.

A The cause is constant pain stimuli

Constant and inadequately treated pain stimuli lead to **exhaustion of the body's own pain inhibiting system**. In addition, the switching in the central nervous system is changed, so that the pain becomes chronic.

Chronic pain no longer arises as a response to a stimulation of the nociceptors ("pain sensors"), but as a consequence of the particular switching status of the synapses in the central nervous system (CNS), i.e. in the brain and spinal cord. The CNS can change, intensify or initially trigger the perception of pain by itself.

The CNS learns "pain conditions" just like coordination in riding a bicycle and forms a pain memory. The longer the pain persists, the more quickly the signal is interpreted as pain.

B Mind and pain are closely linked

Because of the complex neuronal switching between the various regions of the brain, the likelihood of pain becoming chronic and the **individual evaluation of the pain process depend greatly upon mental state**.

Switching within the limbic system, a functional unit of the brain responsible for the processing of emotions, appears to be particularly significant.

Numerous psychosocial factors are known that indicate a particularly high risk of pain becoming chronic. These include depression, unfavourable ways of dealing with pain, and chronic stress factors at work and in private life.

[1] Turk DC, Okifuji A. Pain terms and taxonomies. In: Loeser D et al (Eds). Bonica's Management of Pain (2001) 3rd edition. Philadelphia: Lippincott Williams and Wilkins

[2] IASP Taxonomy Working Group. Part III: Pain terms, a current list with definitions and notes on usage. In: Classification of Chronic Pain. Seattle: IASP Press, updated 2011.