



# Chronic Back Pain: Mechanism and Treatment Techniques

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## DESCRIPTION

Chronic back pain is a painful condition that affects millions of people around the world. In addition to acute back pain, which typically persists for a short period of time and subsequently decreases with accurate treatment, chronic back pain endures for an additional period of time, frequently exceeding three months in duration. It can have an important impact on a person's quality of life by reducing mobility, developing emotional distress, and affecting with regular activities.

### Understanding chronic back pain

Chronic back pain is a multifaceted condition with various potential causes and contributing factors. It can arise from various structures in the back, including muscles, ligaments, discs, joints, or nerves. Some of the most common causes of chronic back pain are as follows:

**Degenerative disc disease:** Degenerative disc disease develops when the intervertebral discs that connect spinal segments deteriorate down continuously. This condition can cause chronic pain due to the loss of disc height, resulting in nerve compression and instability.

**Herniated disc:** When a disc's inner material radiates through its outer layer, it is known as a herniated disc. The displaced material can interrupt nerves surrounding, causing chronic back pain along with leg pain if the affected disc is in the lower back.

**Spinal stenosis:** Spinal stenosis occurs when the spinal canal narrows, compressing the spinal cord or nerve roots. This condition can be age-related and can lead to chronic pain, weakness, and numbness in the back and legs.

**Spondylolisthesis:** Spondylolisthesis refers to the slippage of one vertebra over the adjacent one. This displacement can result in chronic back pain, nerve compression, and spinal instability.

**Muscular imbalances and strains:** Imbalances in the muscles supporting the spine, such as weak core muscles or tight hamstrings, can contribute to chronic back pain. Strains or

sprains in the muscles and ligaments of the back are also common causes.

### Symptoms of chronic back pain

Chronic back pain can manifest in a wide range of methods, with symptoms varying from person to person. The following are some common signs and symptoms associated with chronic back pain:

**Persistent pain:** The hallmark symptom of chronic back pain is continuous or recurring pain that lasts for three months or longer. The pain may range from an aching sensation to sharp, stabbing discomfort.

**Limited mobility:** Chronic back pain frequently leads to reduced flexibility and mobility in the back and spine. Simple activities such as bending, lifting, or twisting may become challenging and painful.

**Radiating pain:** In some cases, chronic back pain may radiate to other areas of the body, such as the buttocks, hips, or legs. This is frequently caused by nerve compression or inflammation.

**Muscle stiffness and tension:** Chronic back pain can cause muscle stiffness and tightness, leading to further discomfort and reduced range of motion.

**Psychological impact:** Suffering with chronic pain can have a detrimental effect on a person's psychological well-being, including depression, anxiety, agitation, and difficulty sleeping.

### Treatment strategies for chronic back pain

Managing chronic back pain requires a comprehensive and personalized technique. The treatment approach may contain a combination of the following elements:

**Medications:** Nonsteroidal Anti-Inflammatory Drugs (NSAIDs), muscle relaxants, and analgesics can help to alleviate pain and reduce inflammation. In some cases, antidepressants or anticonvulsants may be prescribed to target nerve-related pain.

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**Physical therapy:** Physical therapy helps to strengthen the muscles supporting the spine, improve flexibility, and correct post ureal alignments. A physical therapist will develop an exercise regimen according to the individual's requirements,

which can involve movement, strengthening, and core stabilization activities. They may also incorporate techniques such as manual therapy, heat or cold therapy, and electrical stimulation to help alleviate pain and improve function.