

The evaluation of an initial bout of back pain is sometimes a difficult matter, since back pain as a symptom can arise from a variety of pathological conditions, either within the structures of the spinal column or in entirely different organ systems.

When diagnosing back pain it is important to differentiate right away as to whether one is dealing with uncomplicated, non-specific back pain, radicular back pain due to the compression of a spinal nerve root, back pain arising from serious diseases or injuries, or chronic pains.

What are the possible causes of back pain (differential diagnosis)?

Causes within the spinal column (vertebral)

- Degenerative: intervertebral disc pathologies, spondylarthrosis, osteochondrosis
- Deformations, static disorders: spondylolisthesis, scoliosis
- Vertebral fractures
- Tumors: bone tumors, vertebral metastases
- Inflammatory/immunological: Ankylosing spondylitis, rheumatoid arthritis, osteomyelitis, tuberculosis
- Developmental disorder: Juvenile kyphosis
- Endocrinal/metabolic: osteoporosis, hyperparathyroidism

Causes external to the spinal column (extravertebral)

- Psychogenic: chronic back pain, depression
- Gynecological: processes in the fallopian tubes or uterus
- Retroperitoneal: tumors and metastases
- Vascular system: spinal circulatory disorders, aortic aneurysms
- Kidneys and efferent urinary tract: renal tumor, kidney stones, ureteroliths, pyelitis

What does “acute back pain” mean?

Acute back pain is complex compound consisting of the following symptoms:

- Various levels of functional disorder (motor, sensory)
- Regionally circumscribed pain
- Varying levels of pain intensity
- Short duration of pain < 4 weeks
- Pain is relieved by adequate treatment, sometimes improving all by itself

What does “chronic back pain” mean?

A great deal of material has been published on the chronification of pain, with estimates regarding when a painful condition should be defined as chronic varying from 7 weeks to 6 months. A number of different models have been worked out to explain the factors responsible for pain chronification:

In 1994, Basler described “the 5 dimensions of chronic pain” based on the following decisive factors:

- Duration of illness
- Number of attempted treatments (number of physicians, different therapies, operations, and rehabilitation measures)
- Psychological concerns (depression, anxiety, catastrophism, helplessness)
- Social concerns (altered social roles, social isolation)
- Effect on work (days missed, job loss, retraining, early retirement)

The development of chronic pain always involves the complex interplay of a number of individual factors that are potential initiators.

Potential risk factors that can play a role in individual cases are:

- Job-related factors
 - Educational status
 - Professional status
 - Job satisfaction
 - Income
 - Retirement wish
- Sociodemographic factors
 - Age
 - Sex
 - Marital status
 - Social network
- Lifestyle and level of physical exercise
 - Alcohol
 - Drugs
 - Smoking
 - Lack of physical exercise
- Psychological factors
 - Depression, anxiety
 - Stress
- Pain history
 - Duration of sick leave
 - Duration and intensity of pains
 - Whether several pain regions are affected

Chronic pain may develop into a pain disorder in its own right that is increasingly disengaged from its primary cause (simple back pain, for example). Treatment of an existing pain disorder requires a multimodal therapeutic concept with an overall approach that addresses all of the causes of the chronic pain - physical, psychological and social.