

Back Pain

Back pain is a very common complaint among people of all age groups. It is, however, more commonplace among people in their thirties and onwards. Back pain can be disabling and places a huge burden on the world economy because of work-days that are lost and health care costs.

Back pain is mostly due to degenerative (wear and tear) changes in the spine and is usually part of a progressive disease. Thus, the underlying problem responsible for back pain will slowly but surely worsen over time. It is therefore of paramount importance that treatment is focused on supporting the structures of the back and to prevent excessive stress on the spine.

Back pain can be acute or chronic. Chronic back pain is pain that lasts for more than three months. There are three types of spinal pain: **mechanical back pain**, **referred back pain** and **sciatica**.

Mechanical back pain

This is pain that is caused, as the name suggests, by the mechanics of movement. There are muscles, tendons, vertebrae, discs and joints between the vertebrae, nerves and other structures that can cause pain. Mechanical pain is based on inflammation of these structures and the aggravation of this inflammation by movement.

The main source of mechanical **back pain**, however, is the joints between the vertebrae called the facet joints. This pain is typically increased by certain movements. Turning over in bed and getting out of bed in the morning can be difficult.

The pain usually improves with movement, but certain movements, like arching your back, typically makes it worse. It is frequently associated with referred pain, in other words pain that is experienced at a site distant to the source of the inflammation.

Referred back pain

This is pain that spreads from the inflamed tissue in the **lower back** along nerves to other parts of the body. This would frequently be experienced in the area of the hips, the thighs and even between the shoulder blades. This is directly associated with mechanical back pain. It should not be confused with sciatica. The patterns of referred pain frequently overlap somewhat with sciatica, which can be confusing in making the **diagnosis** of the type of pain.

Sciatica (Radicular pain)

This is pain that is caused by a pinched nerve and the pain will travel down the length of the nerve and be most severe at the distal point of the nerve, but can manifest at any point along the length of the nerve. When the nerve, for instance between the fourth vertebra and the fifth vertebra, is being pinched, the pain will be sensed at the ankle and on the top of the foot, as this is where the nerve ends up. It is typical that referred pain spreads to the upper leg, but sciatica would normally spread beyond the knee. Apart from the compression of the nerve root, there is usually also inflammatory changes in the nerve root that leads to pain.

A pinched nerve may require surgery. Although surgery is very effective in loosening nerves that are being pinched and fixing unstable areas of the spine, it almost always leads to increased stress on the rest of the spine and is believed to speed up the wear and tear of the spine.

The main aim of treating spinal pain should always be to support the normal biological recovery processes of the body. Surgery is always the last option and the aim of surgery would be to relieve the symptoms and to maintain the normal biomechanical stability of the spine.

