Degenerative lumbar spine disease

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Background

Degenerative lumbar spine disease (DLSD) is a condition affecting the vertebrae in the lower back and causing pain. It is characterized by degeneration of the intervertebral disc and of the facet joints, and the resultant narrowing of the spinal canal and nerve root canals. DLSD occurs with increasing frequency as people age, and the prevalence increases with age. It is more common in men than women, and there is evidence that genetic factors may play a role.

Symptoms of DLSD include lower back pain, leg pain, numbness, tingling, and weakness, which can affect mobility and quality of life. In severe cases, it may lead to permanent damage.

Diagnosis of degenerative lumbar spine disease

The diagnosis of DLSD is typically made through a combination of physical examination, imaging studies, and sometimes laboratory tests. Imaging studies, such as X-rays, CT scans, and MRI scans, can help to visualize the condition and determine its severity.

Management of degenerative lumbar spine disease

The management of DLSD is tailored to the individual patient’s symptoms and the stage of the disease. It may include medication, physical therapy, and surgery. Early intervention is crucial to prevent progression of the disease and to improve outcomes.

In conclusion, DLSD is a common and serious condition that requires careful diagnosis and management. Early intervention can help to prevent complications and improve quality of life.
In patients with DLSD and radicular pain, conservative measures are usually sufficient to improve the symptom in six to eight weeks, if severe pain persists beyond this time, or if a motor neurological deficit, such as a foot drop, is present, serious consideration should be given to surgery. The timing of surgery is particularly important if neurological recovery is to be achieved. The aim of surgery is to decompress the neural elements and the most common operations performed are lumbar laminectomy and lumbar microdiscectomy. The recent development of endoscopic microdiscectomy technique allows day-case local anaesthetic surgery with the additional benefit of excellent cosmetic results. Spinal cord stimulation remains an effective treatment in patients with severe pain especially if pain persists despite decompresive surgery.

**Prognosis of degenerative lumbar spine disease**

The prognosis of patients with DLSD depends on the underlying diagnosis, delivery of prompt treatment and psycho-social-economic factors. Well motivated patients with a good social support network are more likely to recover well and resume work. Despite all the treatment available, some 10 percent of patients become chronically disabled, especially with back pain. In others, conservative and surgical measures are effective in improving symptoms. Spinal stenosis and radicular pain respond well to surgery with up to 90 percent pain relief. When motor weakness is present or in patients with cauda equina syndrome, the timing of surgery is crucial in determining any neurological recovery with the best results seen in patients operated within 48 hours of presentation. The prognosis for recovery of sensory deficits such as numbness and paraesthesia is less predictable.

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