

## Herniated intervertebral disk

In many cases herniated intervertebral disks in the lumbar spine may be treated conservatively, i.e. without surgery. In cases where pain alone is the dominant symptom, an operation is recommended if other therapeutic modalities, such as rest and medication, have failed to bring about permanent improvement and the patient expressly desires the procedure.

The cauda equina syndrome is an absolute indication for surgery. Patients with this syndrome experience problems with bladder-emptying and bowel-emptying and loss of sensation in the "rider's breeches area," i.e. in the buttocks, genitals and inner sides of the thighs. These symptoms can also occur on one side of the body.

The type of surgical procedure performed depends on the diagnostic findings. For example, the choice of access is made on the basis of whether the intervertebral disk material is oriented toward caudal (i.e. downwards), toward cranial (upwards) or toward lateral (sidewards). In general an outstanding 3D view of nerve structures and disk compression can be obtained by employing a microsurgical procedure with an incision approx. 2-3 cm long. Skin closure can be achieved with cutaneous sutures so there is no need to remove sutures later. An endoscopic access is also possible but is feasible for only a few patients.

In any event only the disk fragments should be removed (sequestrectomy) without cleaning out the entire disk compartment. There are data supporting the superiority of sequestrectomy over nucleotomy (removal of tissue surrounding a herniated disk); in particular, the former procedure is associated with a lower rate of recurrence and fewer inflammations of the disk compartment.