



# Swiss Scoliosis

Centre for spinal and scoliosis surgery  
Zentrum für Chirurgie der Wirbelsäule und Skoliose

## Cervical disc herniation



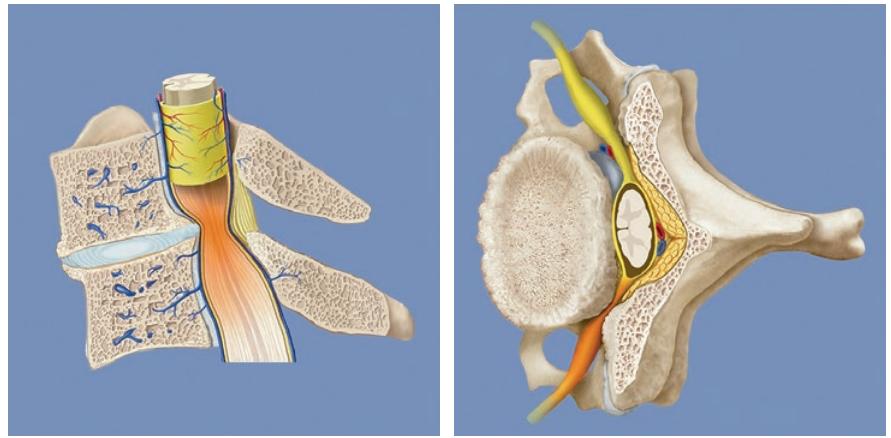


Abb. 1

## Cervical disc herniation

Degeneration causes tears in the outer layer of the disc resulting in herniation of inner gelatin portion (nucleus pulposus) of the disc into the spinal canal. This results in compression of the nerves and spinal cord (Fig.1). The symptoms are acute pain in neck and arm as well as radiation in the region of inner part of shoulder blades. Weakness and numbness can also be present.

### Conservative treatment

In the absence of weakness or paralysis many cases with disc herniation can be treated non-operatively. This includes rest, pain medication, physiotherapy and in selected cases nerve root injection.

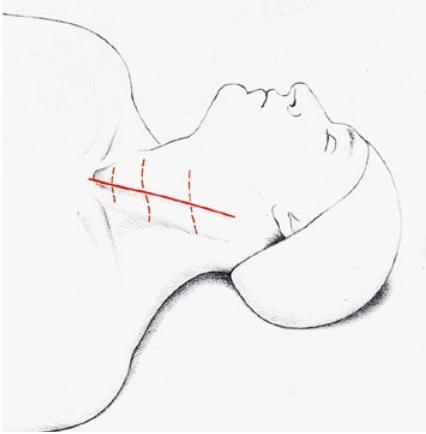


Abb. 2



Abb. 3



Abb. 4



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### Operation

In the presence of neurological problems or very severe pain which is not responding to non-operative treatment, the surgical treatment is indicated. Sudden and severe weakness of arms or legs can represent an emergency situation where a delay of surgical decompression should be avoided.

### Operation Technique

Anterior surgical approach with a transverse skin incision inside a natural skin crease is standard technique for a cervical disc hernia (Fig.2). The trachea and esophagus are moved to the side to expose the disc. The disc and the hernia compression on the nerve are removed. The disc space is then replaced with a titanium cage to carry out fusion (Fig.3).

In young patients with a good disc, a prosthesis can be implanted instead of a fusion with titanium cage (Fig.4).

### Operation risks

Complications are seldom. Pain on swallowing, huskiness of voice can occur, but they are mostly temporary. Nerve root injury can occur during the direct decompression of the nerve from disc tissue and bony spurs. In most cases the nerve function recovers with time, persisting neurological weakness is very seldom seen.

### Postoperative treatment

Patients can stand up the same day after the operation. A cervical collar is not necessary. Patients can move freely, but extreme movements should be avoided during 4 weeks. The hospital stay is 3–4 days. The patient receives instructions from the physiotherapists to do light exercises. The first out-patient follow-up is takes place after 4 weeks, after which full return to normal daily activities is allowed.

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