

Fusion surgery of the cervical spine

In principle, permanent fixation of two vertebrae requires a load-stable bony fusion (actual spondylodesis). Whereas in the past only a bone graft was inserted between the vertebrae, today perforated titanium hollow screws (cages) are used as a new concept, which are screwed in between the vertebral bodies in pairs or individually (Figure 1).

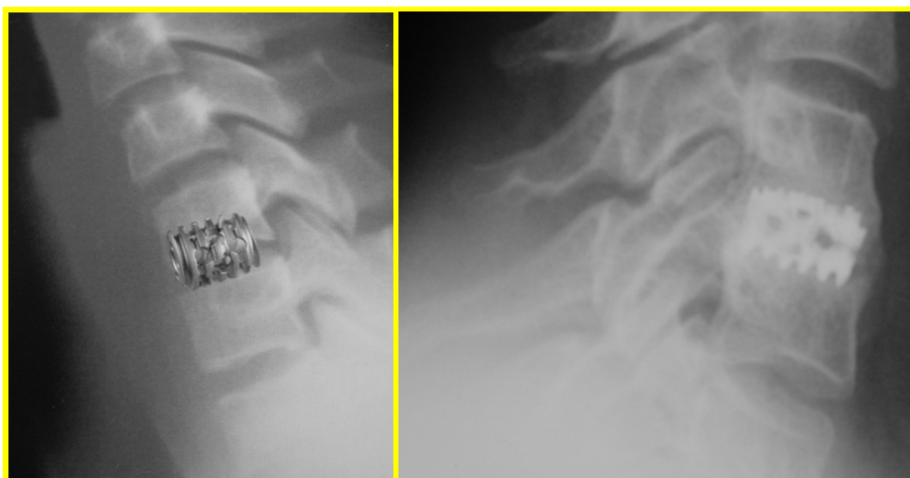
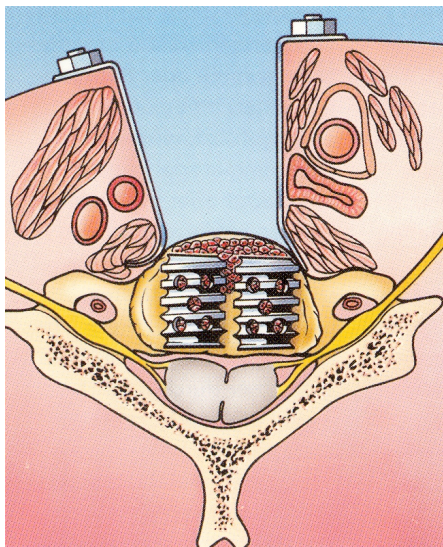


Figure 1

Figure 2

These cages are filled with artificial bone and additional bone is added in front of the cage to create a bony connection between the vertebrae (Figure 2 shows a strong bone bridge in front of the cage). Compared to fixation with a plate, the implantation of a cage alone requires significantly less surgical exposure and therefore patients experience less discomfort after the operation.



Although the anterior approach appears very spectacular due to the anatomical constellation, it is less dangerous and considerably gentler on soft tissues compared to the posterior approach. After a transverse incision of 3 cm in the skin fold, the anterior surface of the vertebrae is accessed directly between the esophagus and trachea on the one hand and the vessels on the other (Figure 3). The disc is then cleared out to the back and any disc hernia is removed at the same time. Subsequently, the thread is cut and the bone-filled cages are screwed in.

Figure 3

No later than 6 hours after the operation, the patient is mobilized with a soft cervical collar. After 2 days, the patient can usually leave the clinic. The rest period is 6 weeks.