

## Elastic fixation with Dynesys system

The stiffening operations have several disadvantages. By increasing the load ratios of the motion segments adjacent to the fused vertebral segment, an adjacent segment overload can quickly occur.

In addition, the removal of bone material means an additional increase in the size of the operation, and healing of the bone graft is not always guaranteed, so that a second operation may be necessary. All these disadvantages of fusion led to considerations to develop a form of fixation that allows controlled mobility of the spinal segment, but eliminates the pain-inducing false movement. These dynamic stabilization systems are now becoming increasingly widespread on the basis of more than 10 years of clinical experience.

The dynamic-neutralizing fixation systems are inserted from behind analogous to the fusion operation. However, the screws inserted into the vertebral bodies are not connected with a rigid metal rod, but with an e-elastic plastic. This results in limiting the applied load while controlling the abnormal motion. There is no need to remove bone, which significantly reduces the surgical trauma. In addition, the risk of overloading the adjacent segment is considerably reduced. Observations over even longer periods of time must prove that the screws in the vertebral bodies do not loosen.

With dynamic-neutralizing fixation, the option of definitive fusion is not given. The aftercare program is much simpler compared to the fusion surgery. The patient can be mobilized on the first day after the operation and no special behavioral measures are necessary. The average hospitalization time is 8 days.