

## **Early experience of a hight adjustable vertebral body replacement in cases of cervical disorders of different origin.**

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For the treatment of degenerative, tumour affected or infected disorders of the cervical spine corpectomy is necessary in some cases. In order to reconstruct the defect an osteosynthesis using a plate combined with bone graft or bone cement may be performed. Postoperative instabilities of the iliac crest and pain are major complications.

Since 8/1998 hight-adjustable titanium cylinders (ADD, Ulrich) were used as replacement in 21 patients. 5 Patients were operated because of spinal metastasis, one because of spinal infection, 13 patients because of long stenosis of the spinal canal (age > 70 years) and 5 patients because of postoperative implant dislocation (intersomatic bone from the iliac crest combined with anterior plate osteosynthesis). In 12 cases one vertebral body, in 7 cases two vertebral bodies and in 2 cases three vertebral bodies were replaced.

There were no intra-operative or major postoperative complications, especially no implant dislocation was observed. In cases of long fusion of kyphotic cervical spines, correct placement of the implant and the appropriate selection of the implant diameter is imperative. In regards to the heterogeneity of the patient group the follow up (6 weeks, 3-6 months) showed a decrease of the preoperative pain and a reduction of the neurological deficits in more than 80 % (17 patients).

The application of the titanium cylinder (ADD, Ulrich) provides a high degree of stability as a result of the hight-adjustable distraction mechanism in combination with the spikes that grip the end-plates of the adjacent vertebral bodies and therefore makes a good neurological outcome possible. However, only long-term follow up will make a final assessment of the vertebral body replacement possible.

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