

Post-traumatic cervical body replacement following corpectomy using the Anterior Distraction Device (ADD): a preliminary report.

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Introduction. Corpectomy to achieve anterior decompression has a fundamental role in the management of traumatic disorders of the cervical spine. Iliac crest bone graft is often used to achieve arthrodesis, however cylindrical titanium mesh and cages with locking plate systems, has recently become a standard, providing immediate strong support with minimum hardware complication and avoiding bone graft-site morbidity. Although each procedure has its supporters, it still unclear if one surgical technique is superior. We report our recent experience with the ADD* used to reconstruct the vertebral defect and to obtain satisfactory stabilization.

Methods. Between November 2000 and October 2002 of a total of 50 cervical spine injured patients, a subgroup of 10 with single level cervical fracture between C3 and T1 was selected. Anterior cervical approach was performed in all cases and the ADD was positioned to replace the vertebral body. A six months follow-up was carried out to verify post-operative cervical stability.

Results. No intra-operative complication was reported. Correct alignment of the cervical spine and foraminal height preservation were confirmed on dynamic radiograph. Neither cage dislodgement nor hardware failure was experienced.

Conclusion. ADD is a simple and reliable method of body replacement following cervical corpectomy. The possibility of in situ continuous distraction allowed easy placement in all cases notwithstanding the different diameters, lengths and angulations of the vertebral defects. The main advantage of this system are the immediate stabilization of the segment by means of the large contact areas and the spikes, securely anchoring the implants in the bone.

*ADD, Anterior Distraction Device is manufactured by Ulrich, Buchbrunnweg 12, 89081 Ulm, Germany