Distractible vertebral body replacement for the thoracic and lumbar spine.

Benjamin Ulmar, Marcus Richter, Georg Kelsch, Balkan Cakir, Wolfhart Puhl, Klaus Huch

We retrospectively evaluated the results after corporectomy and vertebral body replacement in 40 patients with thoracic or lumbar spine collapse due to tumour osteolysis, unstable fractures, spondylodiscitis and Paget's disease. They underwent posterior transpedicular instrumentation followed 7 to 21 days later by vertebral body replacement with a distractible device, the "Obelisc" cage, filled up with autogenous/allogeneic bone graft. The mean residual kyphosis after surgery was only 13.8 degrees. After a mean follow-up period of 16.3 months, there was a mean loss of correction of 1.1 degrees. Perioperative complications occurred in 25 patients (62.5%); one died of septic shock, and the others were treated conservatively. Postoperatively, neurological improvement was noted in 8 patients. Using this in situ distractible vertebral body replacement system to achieve intraoperative stabilisation, neurological improvement and minimal postoperative displacement were achieved with an acceptable perioperative risk.

Acta Orthop Belg. 2005 Aug ;71:467-71 [Pubmed] [Scholar] [Select] [Hide]