TRANSFORAMINAL ENDOSCOPIC APPROACH FOR INTRA AND EXTRAFORAMINAL DISC HERNIATIONS

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Study design
Retrospective survey and evaluation of a case series

Objective
To evaluate clinical outcome and complication rate of the transforaminal endoscopic approach in patients with intra and extraforaminal disc herniations.

Background
There are a lot of different techniques for the removal of intra and extraforaminal disc herniations. Most require partial or complete laminectomy or facet resection which may lead to instabilities and chronic back pain.

Methods
Surgical technique: From posterolateral an access to the foramen is created by sequential dilation without destruction of stabilising structures. Herniated material is removed through the 3.7 mm working channel of a foraminoscope. Concomitant foraminoplasty can be done with special reamers and disc fragments removed from within the spinal canal. All surgeries were done on an outpatient base.

Assessment
475 patients who came to our clinic for transforaminal endoscopic disc surgery were asked to fill in a set of questionnaires at least one year after surgery. Assessed were pain (numeric scale), disability (Roland Morris Disability Questionnaire, ODI), quality of life (SF-36) and health economic parameters.

Results
Rate of intra and extraforaminal herniations was 18%. From those 85 patients 9 were lost. 46 Patients (61 %) returned complete questionnaires. There were no serious adverse events and no reoperations during the follow-up period from 12 to 48 (mean 28) month. Patients had a significant reduction in VAS pain scores (VAS back 2,6, VAS operated leg 1,5) and disability scores. Roland score 5,0 and ODI score 15 SF 36 78. 84 % resumed their previous job after a mean of 30 days off work, 6,5 % were retired and 4 % couldn’t go back to their previous job because of other medical reasons. 20% were on occasional OTC pain killers. 94,8 % stated that they were very satisfied with the surgery and 5,2% that they were moderately satisfied, no patients were unsatisfied.

Conclusion
The transforaminal endoscopic approach proved a valuable option for intra and extraforaminal lateral disc herniations.