

ABSTRACT

- Title of Abstract:** Results in Multiple Herniated Spinal Discs Treated with Endoscopic Minimally Invasive Spine Surgery.
- Purpose:** To demonstrate the ease, safety and efficacy of this type of outpatient percutaneous microdecompressive endoscopic spinal discectomy performed for symptomatic herniated spinal discs, involving multiple discs of the spine in a patient.
- Materials and Methods:** Since 1996 300 cases of 750 multiple spinal discs in patients still symptomatic in spite of at least 12 weeks of conservative care, were treated with percutaneous microdecompressive endoscopic spinal discectomy with low level non-ablative lower Holmium laser energy for laser thermodiskoplasty, i.e., collagen tissue and disc shrinkage/tightening effect of Holmium laser. All cervical and lumbar herniated discs demonstrated positive MRI scan or CT scan findings, and most had positive EMG and NCV tests for cervical and lumbar discs. MRI or CT scans demonstrated contained soft intervertebral disc herniation in all cases. The levels of the cases were 426 lumbar discs, 270 cervical discs, and 54 thoracic discs.
- Results:** Postoperative follow-up demonstrates 86% (258 patients) of all patients had good to excellent symptomatic relief. There were no intraoperative or postoperative complications. Twenty-seven patients demonstrated persistent mild residual pain and paresthesia. The average time to return to work was 10 days for the non-workers' compensation patient. A computerized finite model of the herniated disc, pre and post laser discectomy with collagen tissue tightening or shrinkage, i.e., laser thermodiskoplasty at the collar and the shoulder of the disc is presented. It demonstrates the results of a computerized model for laser induced collagen tissue and the disc shrinkage and contraction for the purpose of disc decompression in spinal discectomy,
- Conclusion:** With appropriate surgical indications for operating on multiple levels of spinal disc, simultaneously the microdecompressive endoscopic spinal discectomy with laser thermodiskoplasty appears to be easy, safe and efficacious. This less traumatic outpatient treatment leads to excellent results with easier faster recovery, and significant economic savings.
- Title of Abstract:** As above

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