

Comparison of Percutaneous Nucleoplasty and Open Discectomy in Patients with Lumbar Disc Protrusions

D. Adam^{1,2,3}, E. Pevzner^{2,4}, R. Gepstein^{2,4}

¹“Carol Davila” Medicine and Pharmacy University, Bucharest, Romania

²“Victor Babes” Clinic, Bucharest, Romania

³“St. Pantelimon” Clinical Emergency Hospital, Bucharest, Romania

⁴Sapir Medical Center , Meir General Hospital, Kfar Sava, Israel

Abstract

Introduction: Coblation nucleoplasty is a minimally invasive method, at middle way between conservative and open surgical treatment of patients with degenerative disc disease and lumbar disc protrusion. Authors compare the outcome of patients treated through the two methods.

Material and results: Two groups of 80 patients each were treated through open discectomy and nucleoplasty. Patients with radicular symptoms caused by disc protrusions, having antero-posterior diameter of herniated disc < 6 mm, resistant to conservative treatment, were operated using nucleoplasty. When antero-posterior diameter of the disc herniation was > 6 mm, classical discectomy method was applied. Classical surgeries (discectomies) were performed by the senior author (D.A.), while the nucleoplasty procedures all three authors equally participated. In the first group improvement of radicular pain was immediate. At 1 year after the procedure only one third of the patients returned to work. In the group treated through nucleoplasty improvement of pain was slow but gradual. After 1 postoperative year the VAS score of patients treated through the two methods were very close. At 3 days post nucleoplasty all patients returned to work. In this group there were not intraoperative or post-operative complications. One patient was afterwards operated through open discectomy.

Conclusion: Coblation nucleoplasty is a safe and efficient method to treat patients with lumbar disc protrusion.

Key words: nucleoplasty, coblation, discectomy

Corresponding author: Danil Adam, MD
Carol Davila” Medicine and Pharmacy
University, Bucharest, Romania
E-mail: adam_danil@yahoo.com