

Minimally Invasive Percutaneous Hydrodiscectomy: Preliminary Report

Lo Wen-Cheng

Taipei Medical University Hospital, Taiwan

Objective: Analysis of the results of percutaneous lumbar Hydrodiscectomy. Discussion of technology, patient indications, contraindications, operative procedures and clinical results.

Material & Methods: The results of percutaneous lumbar Hydrodiscectomy were assessed in 97 patients using Visual Analog Scale (VAS), Oswestry Disability Index (ODI) and Macnab Criteria. Average follow-up time was 5.93

Results

- Admission days: 0-2 days
- Blood loss: minimal
- Operation time: less than 30 minutes
- Return to work: 90% < 2 weeks
- Improved VAS Scores
 - » Back pain: 6.5 ± 1.7 --- 2.9 ± 1.2 ($p < 0.05$)
 - » Leg pain: 8.2 ± 1.1 --- 2.8 ± 1.0 ($p < 0.05$)
- Improved ODI Scores
 - » Pre-Op: 51 ± 19.3 , Post-Op: 22 ± 21.2 ($p < 0.05$)
- MacNab Criteria
 - » 88% excellent and good

Conclusions: Hydrodiscectomy is an effective minimally invasive percutaneous technique for disc herniation treatment. It is effective not only for radiculopathy but also for low back pain treatment. The surgical outcomes can be better predicted by herniation size and type than by patient age, gender or workers compensation status.