Surgical Technique of Percutaneous Endoscopic Interlaminar Discectomy for Migrated Lumbar Disc Hernia at the L5/S Level

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Background: Percutaneous endoscopic discectomy by the interlaminar approach is indicated for lumbar disc herniation at the L5/S level, but a technique that allowed the cannula to move freely had to be developed to treat migrated hernias.

Materials and Methods: The interlaminar method was used to 301 cases of lumbar disc herniation at the L5/S level. They consisted of 196 non-migrated hernias, 42 down-migrated and 48 up-migrated hernias, which required supplementary partial laminotomy and bone resection with a high-speed drill or an original chisel, and 15 severely down-migrated hernias from L4/5 to L5/S, which were treated by a combination of both the interlaminar method and transforaminal method.

Results: The outcome of 90% of the cases was rated satisfactory ("excellent" or "good") according to Macnab’s evaluation criteria. Satisfactory ratings were recorded in 94% of the non-migrated cases, 81% of the down-migrated cases, 83% of the up-migrated cases and 87% of the severely down-migrated cases.

Conclusions: The interlaminar method is safe and administered during the one-night stay, which is done under local anesthesia. Bone resection is beneficial in migrated cases.

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