上位腰椎椎間板ヘルニアに対する
経皮的内視鏡下ヘルニア摘出術

Percutaneous Endoscopic Discectomy for Upper Lumbar Disc Herniation

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要 旨
上位腰椎椎間板ヘルニアの後方摘出は硬膜管腹側での操作が困難で、時に固定術を要する。一方経皮的内視鏡下ヘルニア摘出術 PED は、椎間孔経由による腹側での直接的ヘルニア摘出が可能な、局麻下、一泊入院、7 mm 切開の手術法である。L1/2：19例、L2/3：93例を対象とした。術後1年成績は Macnab 評価で優良の満足群は89％であった。再手術は6例になされた。PED は椎弓・椎間関節・黄色靭帯の切除や固定術を必要としない有益な低侵襲手術法である。

Abstract
When a posterior approach is adopted for upper lumbar disc herniation, it is not uncommon to encounter difficulty in performing resection. At these locations, the space between the bilateral facet joints is narrow and the joints are sharp angled, so that the area where the working cannula can be set on is very small. As a result, intervertebral fusion is sometimes required for patients, most often those with broad hernias or cases complicated by central posterior vertebral osteophytes. Due to the presence of the conus medullaris, incorrect maneuvering of tools may result in myelopathy. Because of these things, we have been developing percutaneous endoscopic discectomy (PED) via the intervertebral foramen using a posterolateral approach. The subjects of this study were 19 cases at the L1/2 level, and 93 cases at the L2/3 level. The subjects consisted of 17 females and 95 males. The average age was 57.0 years old. The average operation time was 64.1 minutes. According to Macnab’s criteria, 56 cases were eventually classified as excellent, 44 were good, 9 fair, and 3 poor. The JOA score changed from 9.1 (preoperative), to 19.6 (1 month later, p＜0.005), to 20.7 (3 months), to 21.4 (6 months), and to 24.1 (1 year, p＜0.005). VAS of the buttock and anterior thigh pain, lumbar pain, and lower extremity numbness also all changed in a similar decreased curve fashion.

Adverse incidents:
1. One case of temporary partial damage to the nerve root.
2. One operation was suspended due to a drop in the patient’s blood pressure, and was then resumed later the same day.
3. In one case, the surgery was performed on a mistaken level of the spine, and was resumed at the correct level later the same day.
4. In some cases, postoperative MRI inspection identified residual material that should have

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