



## 极外侧椎体间融合术治疗腰椎退行性疾病的近期疗效及安全性评价

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Short-term clinical outcomes and safety evaluation of extreme lateral interbody fusion for the treatment of lumbar degenerative diseases

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**摘要** 目的 探讨极外侧椎体间融合术(extreme lateral interbody fusion, XLIF)治疗腰椎退行性疾病的近期疗效及安全性。方法 回顾性分析2009年9月至2013年1月采用XLIF手术治疗的16例腰椎退行性疾病患者的病例资料,男6例,女10例;年龄36~82岁,平均62岁。腰椎失稳症9例,腰椎管狭窄症7例。所有病例在接受XLIF手术的同时均辅助后路经皮椎弓根钉棒系统固定,其中单节段、双节段和三节段融合者分别为11例、4例和1例。采用疼痛视觉模拟评分(visual analogue scale, VAS)、Oswestry功能障碍指数(Oswestry disability index, ODI)和Macnab标准进行疗效评价;通过腰椎正侧位X线片和CT扫描观察融合情况,并记录手术时间、术中出血量和围手术期并发症。结果 单个节段完成椎间盘处理并植入融合器的平均手术时间为75 min,平均术中失血量为83 ml。2例患者术后即出现大腿麻木和屈髋乏力,未行特殊处理,2周后症状消失。所有患者均获得随访,随访时间6~48个月,平均15个月。术后6个月腰痛、腿痛VAS评分较术前平均降低4.6、3.1分,ODI指数较术前平均改善50%,差异有统计学意义。Macnab疗效评定:优9例、良5例、可2例,优良率87.5%(14/16)。术后6个月4例完全融合、11例部分融合、1例未融合;随访12个月以上的8例中7例于术后1年完全融合、1例部分融合,融合率87.5%(7/8)。结论 XLIF手术安全可行,近期疗效好,可用于治疗腰椎退行性疾病。

关键词: 脊柱融合术 腰椎 椎间盘退行性变

**Abstract:** Objective To investigate the short-term clinical effect and safety of extreme lateral interbody fusion (XLIF) for the treatment of lumbar degenerative diseases. Methods Sixteen patients (6 males and 10 females) with an average age of 62 (36 to 82) years were included, consisting of lumbar spinal instability in 9 cases and lumbar spinal stenosis in 7 cases. All patients had undergone XLIF procedure with posterior percutaneous pedicle screw fixation from September 2009 to January 2013. The fusion level was one in 11 cases, two in 4 cases, and three in 1 case. The visual analogue scale (VAS), Oswestry disability index (ODI) and Macnab criteria were used to assess the clinical effect postoperatively while X-ray and CT were used to evaluate the fusion. The operation time, blood loss and postoperative complications were also analyzed. Results Mean operation time and blood loss for discectomy and interbody placement was 75 min and 83 ml per level. We found transient thigh numbness and weakness of hip flexor in 2 cases, which resumed automatically within 2 weeks. All patients were followed up for an average of 15 (6 to 48) months. The VAS score was 4.6 and 3.1 lower in back pain and leg pain while ODI score was 50% lower in six months postoperatively. According to the Macnab criteria, the excellent and good rate was 87.5%. There were 4 complete fusion cases and 11 partial fusion cases in 6 months. 7 cases out of 8 achieved complete fusion while 1 case achieved partial fusion after 12 months. The fusion rate was 87.5%. Conclusion XLIF can provide a satisfactory short-term outcome for the treatment of lumbar degenerative diseases

Key words: Spinal fusion Lumbar vertebrae Intervertebral disc degeneration

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