

Introduction

Compared with traditional conservative management surgical care often is more effective in lumbar disease.[1].In patients with lumbar disease with low back pain (LBP) of greater severity than leg pain, decompression was not as effective as expected in decreasing LBP.[2]. Although surgical techniques have evolved, some patients still suffer from postoperative LBP.[3,4]. In this study, we aimed to investigate the factors that contribute to the postoperative LBP after the lumbar operation.

Methods

A total of 401 patients who underwent lumbar operation between January 2011 and December 2011 were included in this analysis. We investigated patient characteristics and surgical approaches and also compared the radiographic characteristics.

Results

The mean visual analogue scale (VAS) score decreased dramatically after the operation. The mean preoperative VAS score was greater in patients underwent posterior lumbar interbody fusion (PLIF) with longer duration of symptoms, longer operation time, and severe lumbar multifidus (LM) intramuscular adipose tissue (IMAT). The preoperative VAS score was dramatically lower in patients with lumbar herniation. The postoperative VAS score was dramatically lower in patients who underwent PLIF with longer operation time and mild LM IMAT. Postoperative LBP disappeared more often in patients who underwent PLIF with longer operation times. The number of operative levels and type of lumbar spine disease also were associated with postoperative LBP.

Conclusions

Type of surgery, operation time, number of operative level, and type of disease were risk factors for the postoperative LBP. Patients underwent PLIF with shorter symptom duration, longer operation time severe LM IMAT, and lumber spondylolisthesis reported more severe LBP before the operation. Patients underwent discectomy with shorter operation times.

Learning Objectives

By the conclusion of this session, participants should be able to describe that type of surgery, operation time, number of operative level, and type of disease were risk factors for the postoperative LBP.

References

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