

Introduction

Degenerative lumbar scoliosis (DLS)represents a major surgical challenge in spinal surgery for the elderly.

Treatment options include anterior disc height reconstruction and scoliotic correction with posterior pedicle screw fixation. This type of surgery is associated with a high morbidity. The less invasive this type of surgery can be performed the higher the benefit for the patient is. This study presents a new technique that enables the surgeon to decompress and correct at the same time from posterior using the lateral extended TLIF (latexTLIF)approach.

Methods

In a consecutive series of 180 patients operated by the latexTLIF approach from 12/2014 to 12/2015 16 with severe DLS were investigated retrospectively.

Measured parameters preoperative and at 6 months postoperative: VAS, ODI, walking distance, subjective state of satisfaction (would do operation again and can recommend) and radiologic correction of scoliotic deformity and restoration of lordosis.

A novel TLIF cage, ACRON, was

Results

All patients improved in clinical and radiological parameters.

VAS preop mean: 8.5 - postop mean:2.5

ODI dropped postop by 25 points on average

Walking distance (in meter) preop all patients 100 to 500m postop more than 500m

Subjective state of satisfaction postop 100%

Preop scoliosis: mean 33.6° (28.8° - 42.8°)

Postop scoliosis: mean 2.7° (1.0° - 3.9°)

Preop global lordosis: mean 26.7° (21.2° - 36.1°)

Postop global lordosis: mean 43.1° (37.7° - 46.1°)

Complications intraop: 1 dural tear

Complicationes postop: none

Conclusions

This modified TLIF technique - latexTLIF - showed up to effectively correct scoliotic deformity and restore lordosis significantly by a

Learning Objectives

surgical strategies in DLS

References

