Effect of Transforaminal Lumbar Interbody Fusion on Lumbar Lordosis and Disc Height

A thesis submitted in partial fulfillment of the requirements for the Master degree in Neurosurgery

By:

Tarek Ahmed Salah Tawfik

Supervised by:

Prof. Dr. Ahmed Salah Eldin Hassan

Professor of Neurosurgery

Cairo University

Dr. Ashraf Abdel-latif Osman

Lecturer of Neurosurgery
Fayoum University

Dr. Hosam Eldin Mostafa

Lecturer of Neurosurgery
Cairo University



Faculty of Medicine
Cairo University
2021

Summary

There has been a dramatic increase in the number of lumbar fusions performed. Indications for lumbar fusions include discogenic back pain, spondylosis and spondylolisthesis. A common goal of lumbar spinal surgery is to restore sagittal alignment. Loss of lumbar lordosis (cobb's angle) is strongly associated with patient dissatisfaction and may cause degenerative processes of adjacent segments. Our study is to see the effect of transforaminal interbody fusion on disc height and lumbar lordosis. This is a retrospective study conducted in Cairo University Hospitals and Fayoum University Hospitals, in the department of neurosurgery. All patients were reviewed for detailed history, clinical examination and investigations. The operations were performed on those who had persistent low back pain, radicular pain, or neurological claudication in spite of conservative treatment for at least 3 months

This study is designed to include 2 groups. Group A includes patients with TLIF and Group B includes patients with posterolateral fusion with total number of 40 patients of both groups.

The aim of this study is measurement of lumbar lordosis (cobb's angle) and disc height in cases of single level lumbar fixation operated by posterolateral fixation with transforaminal interbody fusion and compare them with traditional posterolateral fusion without cage insertion.