

Evaluation of minimally invasive lumbar interbody fusion in degenerative lumbar disc disease

BY

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M.B.B.CH

M.SC

A thesis submitted in partial fulfillment

Of

The requirements for the degree

"MD"

In

ORTHOPEDIC SURGERY

Department of Orthopedic surgery

Faculty of Medicine

FAYOUM UNIVERSITY

2022

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2022

Summary

Our study was conducted on twenty-five patients of Degenerative spine disease, who underwent MISS TLIF at Sankt Elizabeth hospital, Gutersloh, Germany and Fayoum university hospital from June 2017 to July 2019. Early postoperative results data were obtained before hospital discharge, while late postoperative results data were obtained at 3, 6 months and 1 year, postoperatively.

The entire patient had clinical and radiological diagnosis of degenerative spine disease. All of these patients underwent MISS TLIF. Findings were described and treated. On completion, the clinical outcome was assessed with ODI and VAS scores. Fusion was assessed using the Bridwell interbody fusion grading system.

Preoperative VAS score of LBP (mean 7.96) showed statistically significant decrease of values in early postoperative period. Significant decrease three and six month post-operative (reaching 1.6 at 1 Year follow-up), as well as Preoperative VAS score of limb pain (mean 7.32) showed statistically significant decrease of values starting of immediate postoperative period with mean 4.4 (reaching 1 at 1 Year follow-up).

The ODI for all patients showed significant improvement from mean value 51.8 % preoperative to mean 29.96%. Three month postoperative & mean 13.8 % at 1 Year postoperative).

As regard to fusion, employing the Bridwell interbody fusion grading system, 72% of the patients (18 patients) attained a grade 1 fusion and 24% (6 patients) attained a grade 2 fusion and 4% (one patient) attained grade 3 at 6 months follow-up. No cases with grade 4