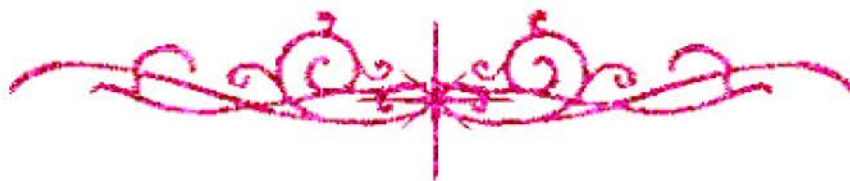


# بسم الله الرحمن الرحيم





# شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم





# جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

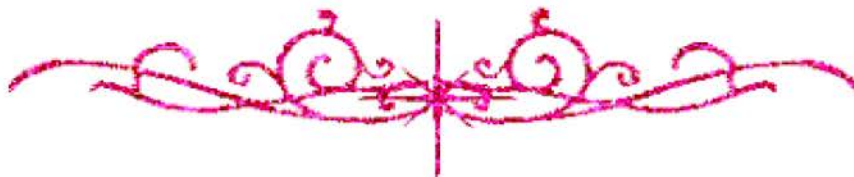
## قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها  
علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات



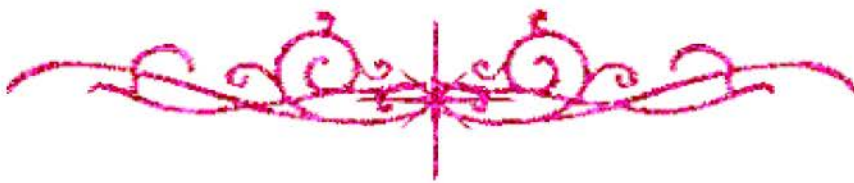
## يجب أن

تحفظ هذه الأقراص المدمجة بعيدا عن الغبار





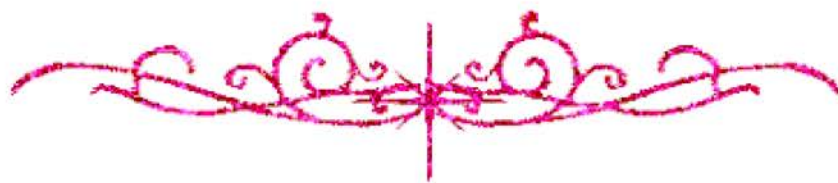
# بعض الوثائق الأصلية تالفة







بالرسالة صفحات  
لم ترد بالأصل



**Assessing the Outcome of Transforminal  
Lumbar Interbody Fusion and Posterolateral  
Lumbar Fusion with Instrumentation in  
Treatment of Degenerative Lumbar Disorders**

Thesis

*Submitted for Partial Fulfillment of M.D. Degree in  
Neurosurgery*

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قالوا

سبحانك لا علم لنا  
إلا ما علمتنا إنك أنت  
العليم العظيم

صدق الله العظيم

سورة البقرة الآية: ٣٢



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**Fady Khalaf Sayed Selim**



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## List of Abbreviations

| Abb.           | Full term                                                                                                              |
|----------------|------------------------------------------------------------------------------------------------------------------------|
| ALD .....      | Adjacent level disease                                                                                                 |
| ALIF .....     | Anterior lumbar interbody fusion                                                                                       |
| ALL.....       | Anterior longitudinal ligament                                                                                         |
| AP .....       | Anterior posterior                                                                                                     |
| BAK cage ..... | Bagby and kusch                                                                                                        |
| BMD .....      | Bone mineral density                                                                                                   |
| CES.....       | Cauda equina syndrome                                                                                                  |
| DBM .....      | Demineralized bone matrix                                                                                              |
| LBP .....      | Low back pain                                                                                                          |
| LLIF.....      | Lateral lumbar interbody fusion                                                                                        |
| LSTV.....      | Lumbosacral transitional vertebrae                                                                                     |
| NSAID .....    | Non steroidal anti inflammatory drug                                                                                   |
| ODI .....      | Oswestry disability index                                                                                              |
| PLF .....      | Posterior lateral fusion                                                                                               |
| PLIF.....      | Posterior lumbar interbody fusion                                                                                      |
| PLL .....      | Posterior longitudinal ligament                                                                                        |
| SPAASMS.....   | Score of pain, physical activity, additional<br>pain medication, additional ER visits, sleep,<br>mood and side effects |
| TLIF.....      | Transforaminal lumbar interbody fusion                                                                                 |
| VSP .....      | Variable screw system                                                                                                  |

## Abstract

**Background:** Degenerative lumbar disorders are relatively common condition that typically affects persons over the age of 50 and are more common in females. Patients typically present with a constellation of symptoms that include back pain, radiculopathy, and/or neurogenic claudication. **Aim of the Work:** to assess the clinical and radiological outcome of Transforaminal Lumbar Interbody Fusion (TLIF) and posterolateral fusion (PLF) in the treatment of degenerative lumbar disorders. **Patients and Methods:** a prospective study was conducted on patients with degenerative lumbar spondylolisthesis and degenerative lumbar spine stenosis who were admitted to Neurosurgical department at Ain Shams University hospital and Arab contractors' medical center and underwent lumbar spine fixation with either transforaminal interbody fusion or posterolateral fusion from February 2017 to February 2019. The patients were divided into two groups according to the operative procedure done for each group. Group A (20 patients) included patients who underwent transforaminal lumbar interbody fusion. Group B (20 patients) included patients who underwent posterolateral fusion. **Results:** We found that both TLIF and PLF provide improvement of disability and pain in patients with degenerative lumbar disorders. TLIF is superior to PLF with regard to achieving radiographic fusion. There is no strong evidence to support the use of TLIF over traditional PLF in treatment of degenerative lumbar disorders, especially with the increased material costs associated with interbody fusion. **Conclusion:** both TLIF and PLF provide improvement of disability and pain in patients with degenerative lumbar disorders. TLIF is superior to PLF with regard to achieving radiographic fusion.

**KEY WORDS:** TRANSFORMINAL LUMBAR INTERBODY FUSION AND POSTEROLATERAL LUMBAR FUSION WITH INSTRUMENTATION IN TREATMENT OF DEGENERATIVE LUMBAR DISORDERS