



تم بحمد الله



شبكة المعلومات الجامعية

# جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

## قسم

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



## يجب أن

تحفظ هذه الأفلام بعيدا عن الغبار

في درجة حرارة من ١٥-٢٥ مئوية ورطوبة نسبية من ٢٠-٤٠%

To be Kept away from Dust in Dry Cool place of  
15-25- c and relative humidity 20-40%



# شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم

بالرسالة صفحات  
لم ترد بالأصل

بعض الوثائق  
الأصلية تالفه

CL/2/17

# Lumbar Spine Fusion Using Interbody Cages

Essay

Submitted for Partial Fulfillment of Master Degree  
Of Orthopaedic Surgery

Presented by

**Hossam Abd El Salam El Sayed**  
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Faculty of Medicine  
Ain Shams University

2004

019



بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

فَأَمَّا الزَّبَدُ فَيَذْهَبُ جُفَاءً وَأَمَّا مَا يَنْفَعُ النَّاسَ  
فَيَمْكُثُ فِي الْأَرْضِ كَذَلِكَ يَضْرِبُ اللَّهُ الْأَمْثَالَ

صدق الله العظيم  
سورة الرعد - آية (١٧)



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## **AIM OF THE ESSAY**

To review interbody fusion by using cages in the lumbar region for treatment of chronic spine diseases. In this essay reviewing literature in anatomy of lumbar region, biomechanics of lumbar region, cage designs and concepts, methods and approaches for lumbar cages and end by conclusion and recommendations for cage fusion in lumbar region.



## INTRODUCTION

Spinal fusion is indicated in management of:

1. Degenerative disc diseases.
2. Degenerative spondylolisthesis.
3. Segmental instability.
4. Isthmic spondylolisthesis.

Interbody fusion has long been shown to achieve solidity in a high percentage of cases. Interbody fusion technique using cages is very recent advance in lumbar fusion surgery, the advantages of cages are initial distraction which stretches ligaments and axial load thus decrease the need for structural support done by bone graft to restore disc space and decrease compression on the nerve root and thus allowing to restore anatomic and biomechanic and biologic function of spine fusion (*Gregersen and Lucas 1997*).

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