



شبكة المعلومات الجامعية

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ





شبكة المعلومات الجامعية



# شبكة المعلومات الجامعية

## التوثيق الالكتروني والميكرو فيلم

# جامعة عين شمس

التوثيق الالكتروني والميكرو فيلم

## قسم

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



## يجب أن

تحفظ هذه الأفلام بعيداً عن الغبار

في درجة حرارة من 15 – 20 مئوية ورطوبة نسبية من 20-40 %

To be kept away from dust in dry cool place of  
15 – 25c and relative humidity 20-40 %



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# بعض الوثائق الأصلية تالفة



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بالرسالة صفحات  
لم ترد بالأصل

# EVALUATION OF ACRYLIC INTRA OCULAR LENS IMPLANTATION IN CHILDREN

THESIS

Submitted for Partial Fulfillment of  
The M.D. Degree in Ophthalmology

BY

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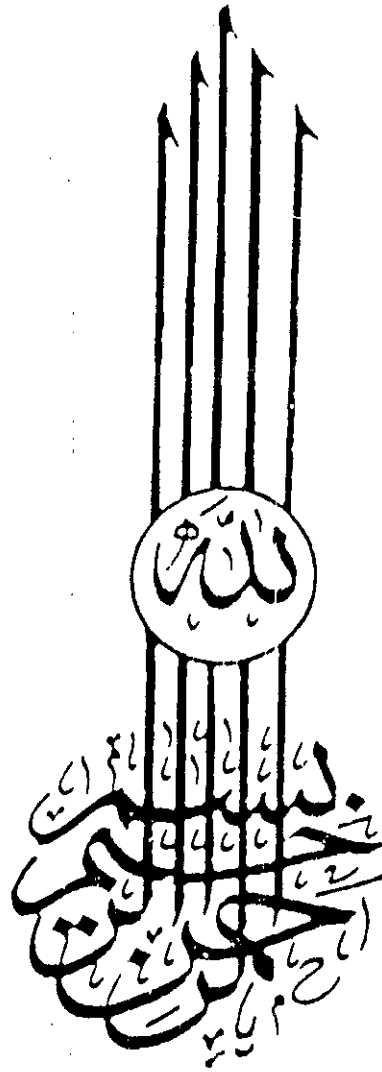
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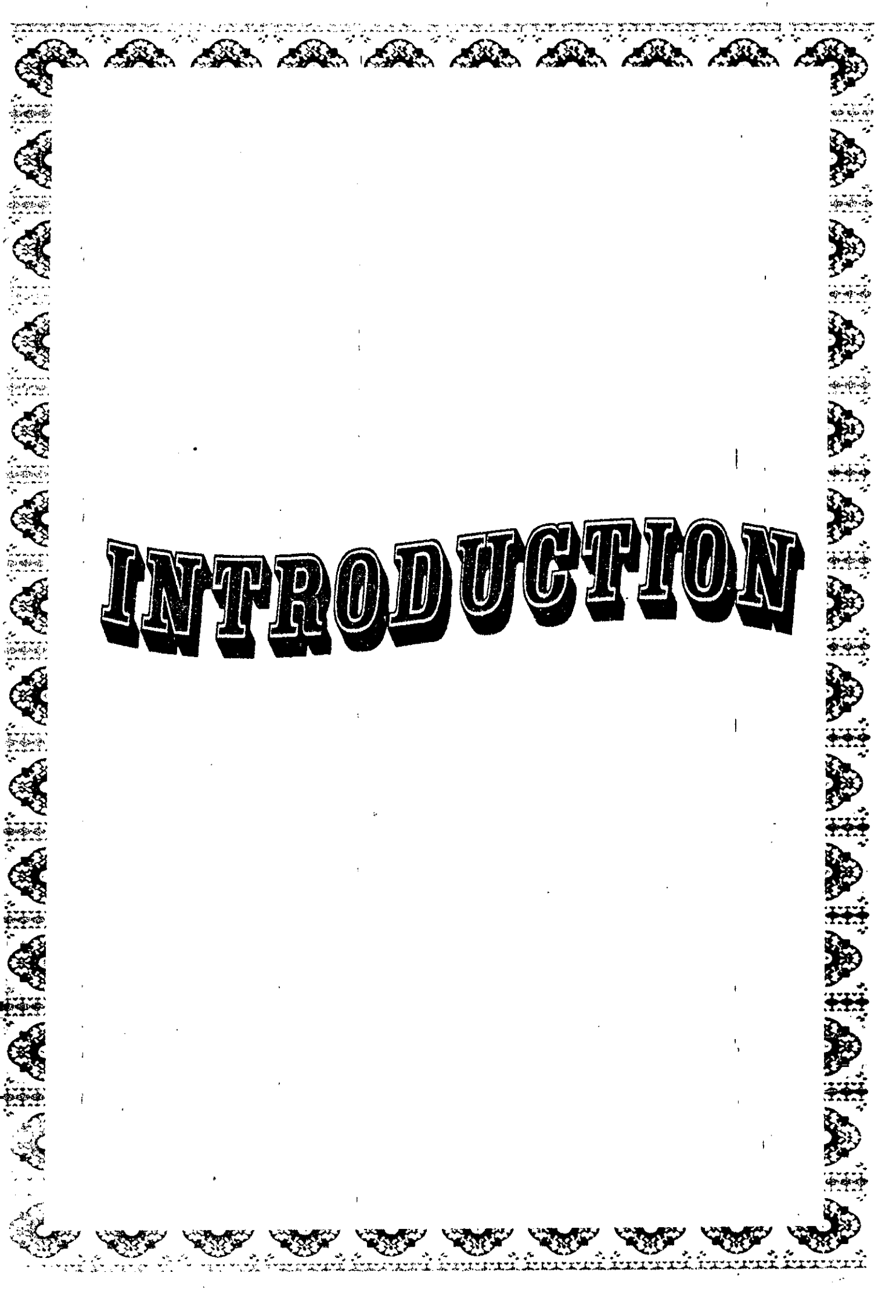
وَعَلَيْكَ مَا لَمْ تَكُن تَعْلَمُ وَكَانَ فَضْلُ  
اللَّهِ عَلَيْكَ عَظِيمًا

(الآية ١١٢ سورة النساء) صدق الله العظيم

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# INTRODUCTION

# INTRODUCTION

Cataract is the most important cause of treatable blindness in children, thus the timing of treatment is critical (*Vasvada & Chauhan, 1994*).

In Pediatric patients affected by either unilateral or bilateral cataracts, the decision of whether surgery is indicated or not is based on the measured or estimated level of visual acuity or acuity potential weight against the risks of the procedure. In addition, whether the cataract is unilateral or bilateral and whether it is a complete or partial also affect the decision for surgery. The strategy for treating congenital or infantile cataracts is to avoid irreversible amblyopia. Appropriate preoperative planning and recognition of potential difficulties aid in the prevention of operative complications (*Park et al., 1993*).

The possibility of developing amblyopia is the reason to implant an intraocular lens in a child (*Taylor, 1989*). Theoretically, the IOL provides an immediate visual rehabilitation through a clear visual axis, with the possibility of avoiding or treating amblyopia and retaining as much as possible of binocular vision (*Hiles et al., 1990*).

The choice to implant an intraocular lens as a primary procedure is recommended, as it is a reasonable approach to achieve the aim of surgery in children (*Kora et al., 1992*).

Intraocular lenses design and size, that seem to fit the criteria for implantation in eyes of children who are two years or older, are flexible open-loop one piece all PMMA, modified C-loop capsule intraocular lenses with an overall length of 12 to 12.5 mm. Modern capsular intraocular lenses of these types are much more flexible and easier to insert than the stiff, rigid, one piece IOL (*Wilson et al., 1994a*).

Foldable IOLs, particularly acrylic one, offer advantages over other types of intraocular lenses including, easier implantation through a small incision, lower aqueous flare intensity, decrease postoperative astigmatism, clear posterior capsule postoperatively. Also, YAG laser posterior capsulotomy can be performed without causing damage to the optic (*Oshika et al., 1996*).

Most eyes with acrylic IOLs retained a clear posterior capsule due to the high refractive index of the soft acrylic material that make the optic of this lens is very thin, leaving very small lens space between anterior and posterior capsule (*Nishi & Nishi, 1995*). This also reduces the likelihood of postoperative iris chafing and posterior synechia formation (*Oshika, et al. 1996*).

# AIM OF WORK

## AIM OF THE WORK

This study was performed to assess the efficacy and safety of soft acrylic intraocular lenses implantation through a small corneal incision in children and their clinical outcome.

# REVIEW OF LITERATURE