سامية محمد مصطفى



شبكة المعلومات الحامعية

## بسم الله الرحمن الرحيم



-Caro-

سامية محمد مصطفي



شبكة العلومات الحامعية



شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم





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شبكة المعلومات الجامعية

## جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

## قسو

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



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سامية محمد مصطفى

شبكة المعلومات الحامعية



بالرسالة صفحات لم ترد بالأصل





## EFFICACY OF TOPICAL CARBONIC ANHYDRASE INHIBITORS COMPARED TO BETA BLOCKERS AS AN INTRAOCULAR PRESSUR LOWERING MEASURE PRIOR TO CATARACT EXTRACTION

#### **THESIS**

Submitted in Partial Fulfilment of the Master Degree in Ophthalmology

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## المال المرااحي

# وَعَلَّمَكَ مَا لَمْ عَلَيْكَ الْكِتَابَ وَالْحِكْمَةُ وَعَلَّمُ فَعَلَّ فَضِلُ وَعَلَّمُكَ مَا لَمْ تَكُن تَعِلَمُ وَكَانَ فَضِلُ وَعَلَّمُكَ مَا لَمْ تَكُن تَعِلَمُ وَكَانَ فَضِلُ اللّهِ عَلَيْكَ عَظِيماً اللّهِ عَلَيْكَ عَظِيماً

" **صدق الله العظيم** " (( سورة النساء .. آية الاس ))

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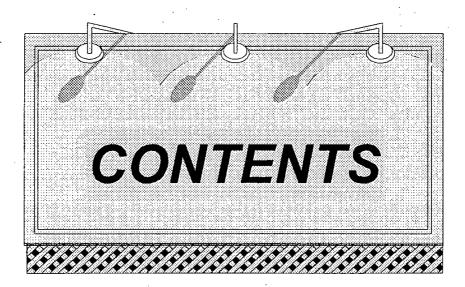
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## INTRODUCTION AND AIM OF THE WORK

## INTRODUCTION AND AIM OF THE WORK

It was established that preoperative hypotony improves in an essential manner the preoperative condotions, influences favourably the course of cataract surgery and decreases the number of complications.

A topical carbonic anhydrase inhibitor (CAI) with ocular hypotensive effect is comparable with that of oral agents but without their systemic effects.

Dorzolamide a topically active (CAI) is an effective new glaucoma medication that decreases aqueous formation.

It appears to have slightly less ability to lower intraocular pressure I.O.P than oral agents. It lowers I.O.P by 20-23% in patients with primary open angle glaucoma (POAG) and ocular hypertension, while oral CAIs lowers I.O.P by 24-32%. In patients with POAG who receive timolol 0.5%, the addition of dorzolamide produces addational lowering of I.O.P by 13%. (Maren et al., 1987).

The aim of this work is to study and to compare topical CAI, dorzolamide HCL 2% and beta blockers, timolol malcate 0.5% in lowering I.O.P prior to cataract extraction.

## REVIEW OF LITERATURE

Recent advances in cataract surgery regarding microsurgical techniques, types of suturing material with water tight closure of the wound, and the wide use of intraocular lenses invites the interest to study the behaviour of I.O.P before and after cataract extraction. The normal eye has a tension above atmospheric pressure, once the eye is opened, the I.O.P falls to atmospheric pressure, so that (*relative volume within the eye*) of the choroid and the vitreous is the major concern. (Mac Diarmid and HolLoway, 1976).

However, if the operation starts with a raised I.O.P, grave risks are involved. Iris, lens and vitreous may be extruded in addition to explusive haemorrhage may occur if a raised pressure is suddenly lowered by the release of aqueous humour (Ruiz and Salmonsen, 1976).

Soft eye is desirable for cataract extraction. However, so, the anterior chamber can be opened without sudden marked changes in ocular dynamics.

## REVEIW OF LITERATURE