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Refractive and Corneal Topographic Changes after Primary Pterygium Excision and Comparison between Auto Grafting and using Mitomycin c.

Thesis

Submitted for partial fulfillment of master degree in Ophthalmology

By

Mohamed Gamal Arafa
M.B.B.Ch (Cairo University)

Supervised By

Prof. Dr. Magdy Mohamed Elbarbary

Professor of Ophthalmology Faculty of Medicine – Ain Shams University

Prof. Dr. Amr El-Awamry

Ass.Professor of Ophthalmology Faculty of Medicine – Ain Shams University

Dr. Tarek abd EL-Aziz

Lecturer of Ophthalmology Faculty of Medicine – Ain Shams University

Ophthalmology department
Faculty of Medicine - Ain Shams University
(Cairo 2020)



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List of Abbreviations

Abb.		Full term
ACD	:	Anterior Chamber Depth
AS-OCT	:	Anterior Segment Ocular Coherence Tomography
CTS		Corneal topography system
CCT	:	Central Corneal Thickness
D	:	Diopter
DNA	:	Deoxyribo-Nucleic Acid
H&E	:	Hematoxylin and Eosin
MMC	:	Mitomycin C
NSAIDs	:	Non-Steroidal Anti-Inflammatory Drugs
OCT	:	Optical Coherence Tomography
RNA	:	Ribo-Nucleic Acid
UV-B	:	Ultra Violet B rays
VEGF	:	Vascular Endothelial Growth Factor

Introduction

Pterygium is a degenerative disorder of the conjunctiva. It is usually seen as a triangular fleshy fibrovascular proliferation from the bulbar conjunctiva onto the cornea, located mostly on the nasal side. (McCarty CA, et al, 2000)

In advanced cases it can affect vision as it invades the cornea causing astigmatism and scarring. Many people complain of cosmetic appearance. The most important complication after surgery is the recurrence rate. (Kosol K 2003)

Horizontal flattening is the most frequent corneal topographic change in eyes with pterygia. Several mechanisms have been reported to explain corneal flattening induced by pterygium. Pooling of tears at the pterygium apex plays an important role in corneal topographic changes. In fact, a tear meniscus developing between the corneal apex and elevated pterygium may flatten the normal corneal curvature in that area. Preoperative topography revealed the expected with the rule astigmatism in most of the younger patients and more bizarre patterns in the older patients. (Yilmaz S, et al 2008)

There are many techniques used for pterygium surgery, one of them is conjunctival auto grafting which is the most common technique used. Mitomycin c is an adjuvant treatment used to decrease the recurrenc rate. (Ma DH, et al., 2000)

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