A STUDY OF HISTOPATHOLOGICAL CHANGES OCCURRING IN CORNEAL GRAFT AFTER REJECTION

Thesis

Submitted for Partial Fulfilment of the

M.Sc. Degree in (Opthalmology)

By

Maha Mohamed Ibrahim

Under the Supervision

Of

Professor Dr. Mahmoud Hamdi Ibrahim

Prof. of Ophthalmology

Ain Shams University

And

Dr. Fatma M. Sh. El Henawy

Assistant Professor of Opthalmology

Ain Shams University

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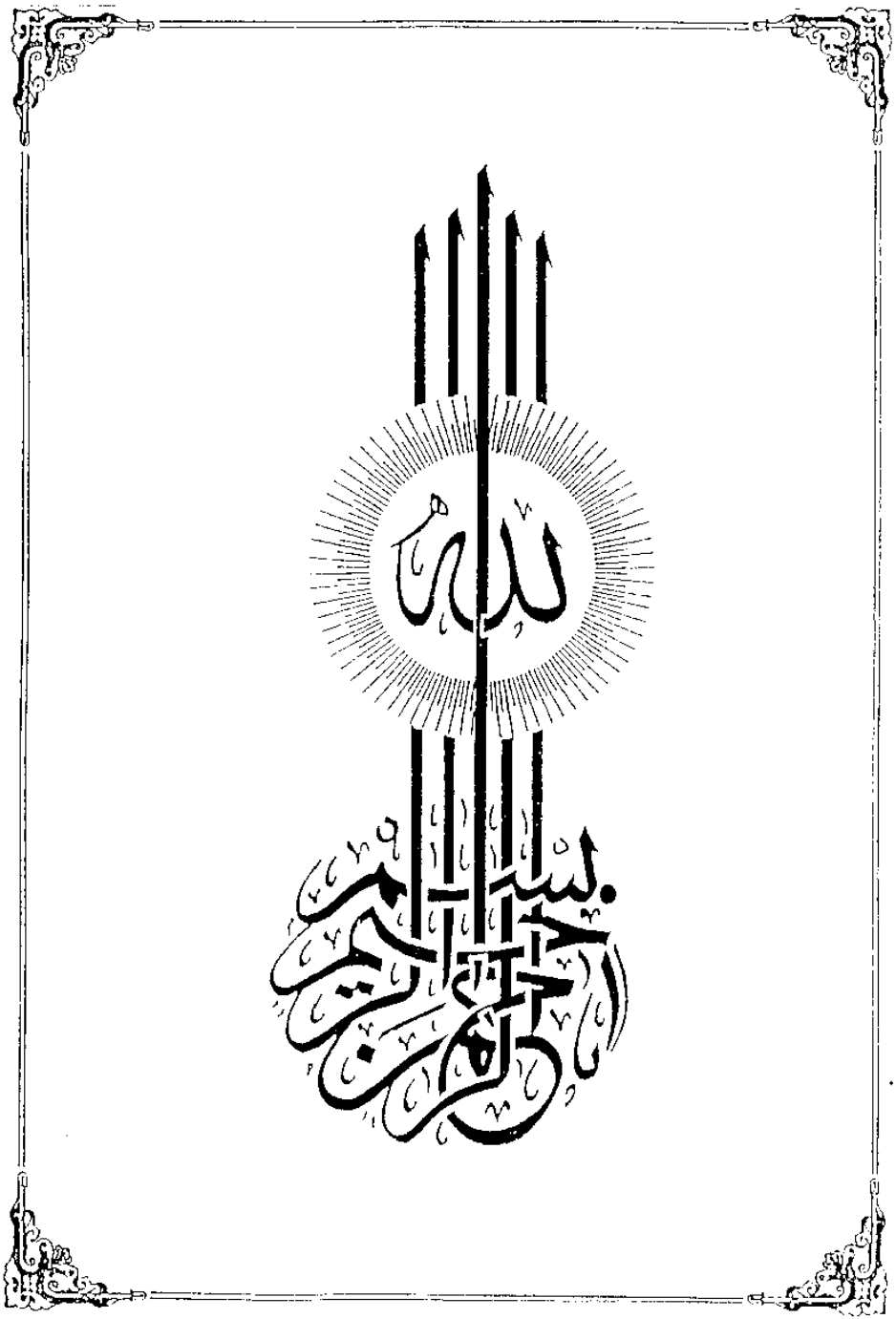

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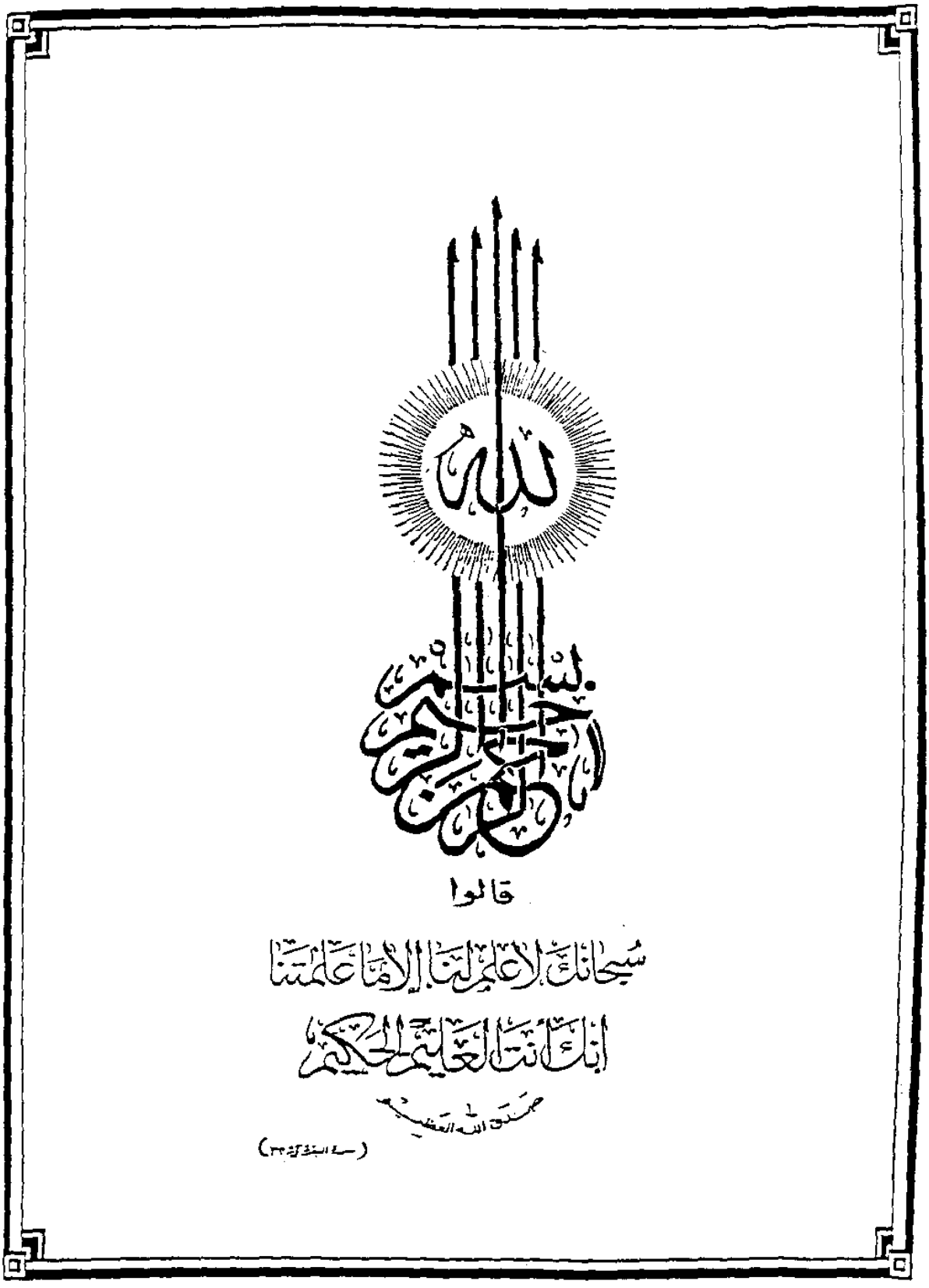

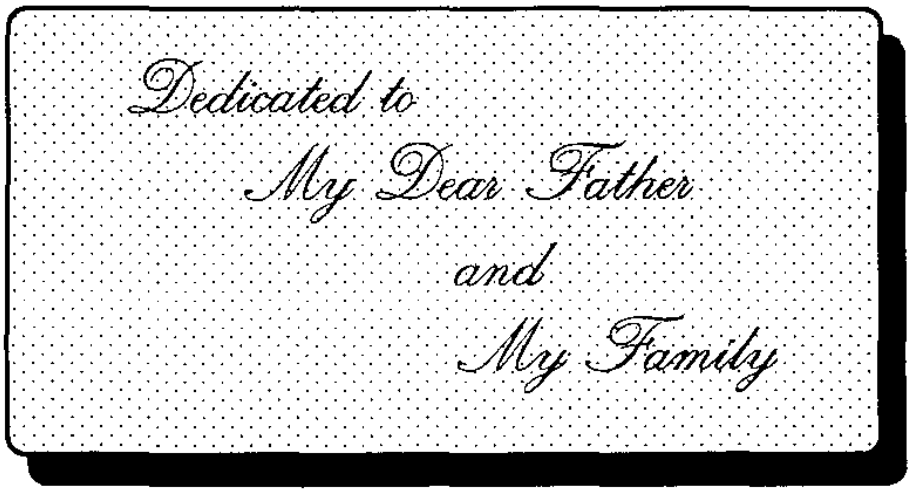

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Maha Mohamed Ibrahim

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INTRODUCTION

The subject of corneal grafting derives its importance from the fact that corneal diseases are a major cause of defective vision, most of them can't be managed except by corneal grafting, *(Völker - Dieben 1989)*.

Allo corneal grafting has long been known as the line of treatment for corneal opacities, long before tissue transplant has entered our defense mechanism (armintarium) to treat human sufferings.

Corneal transplant failure still remains the problem to be solved. 2.3% to 6.8% of cases of penetrating keratoplasty are likely to fail because of corneal allograft rejection *(Polak, 1973)*.

Most of the literature, stated that 12% of these rejection reactions in good prognosis cases & up to 40% in complicated cases eventually lead to corneal transplant failure *(Polack, 1973)*.

Not to mention that heterocorneal grafting is likely to fail in 100% of cases.

In *1948, Paufique & Coworkers* used the term "maladie du graffon" (graft sickness) to describe the phenomenon of graft opacification for which no clinical explanation could be found.

According to them, this reaction occurred after an initial period of a clear successful graft operation and was an allergic manifestation to the transplanted tissue *(Paufique, et al., 1948)*.

Edward Maumenee in *1951* provided experimental evidences that a graft rejection in rabbits was caused by sensitization of the host to donor corneal tissue.

The clinical aspects of corneal homograft rejection was described by *Maumenee* in *1962*.

Even though scarring following rejection can be permanent, in many instances, the degree of opacification can be lessened by early and adequate treatment with corticosteroids or immunosuppressive drugs.