

Study of Intraocular Melanoma

Essay

Submitted in partial fulfilment of
M. S. degree in Radiotherapy
and nuclear medicine

By

Hatem Mohamed Abd Alla
(M. B. B. ch.)

Supervisors

Dr. Soheir Helmy Mahmoud

Ass. Prof. of radiation oncology and nuclear medicine
Ain Shams University

Dr. Soheir Sayed Ismael

Ass. Prof. of radiation oncology and nuclear medicine
Ain Shams University

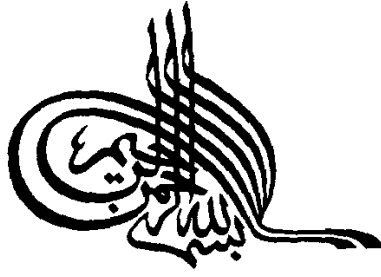
Dr. Anwaar Mahmoud Rady

Consultant of radiation oncology and nuclear medicine
Ain Shams University

Ain Shams University
1996







في الأرض آيات للموقنين

صدق الله العظيم



Dedication

To my father AND MOTHER,

who gave me the kindness, time, effort, support, and moral soughts. They tolerate too much without a word of gratefulness. No words can express my indebtedness to them.

To my Wife.

I am deeply grateful to my wife *Dr. Nancy Abdel-Aziz*, for her real help, and constant encouragement. She saved no help and suffered too much. Her print is present on every page of this work.

Dr. Hatem Mohamed

Acknowledgment

*I would like to express my deep thanks and sincere gratitude to **Dr. Soheir Helmy Mahmoud**, Assistant Professor of Radiation Oncology and Nuclear Medicine, Ain Shams University. I am indebted to her for her close supervision, valuable instructions, encouragement and thorough revision of this work.*

*I owe special gratefulness and much regards to **Dr. Soheir Sayed Ismael**, Assistant Professor of Radiation Oncology and Nuclear Medicine, Ain Shams University for her guidance, valuable support, precious instructions and encouragement throughout this work.*

*I would like to display my very indebtedness to **Dr. Anwaar Mahmoud Rady**, Consultant of Radiation Oncology and Nuclear Medicine, Ain Shams University for the limitless help, valuable advise and kind encouragement.*

Hatem Mohamed Abd-Alla

Table of Contents

| Subject | Page No. |
|--|-----------------|
| Anatomy of the eye | 1 |
| Epidemiology of uveal melanoma | 8 |
| Pathology of uveal melanoma | 15 |
| Clinical presentation of uveal melanoma | 26 |
| Diagnosis of uveal melanoma | 34 |
| Staging of uveal melanoma | 53 |
| Treatment of uveal melanoma | 56 |
| Prognosis of uveal melanoma | 86 |
| Summary | 91 |
| References | 93 |
| Arabic summary | |

Anatomy Of The Eye

ANATOMY OF THE EYE

The eye ball, the peripheral organ of sight, is situated in the cavity of the orbit, the walls of which serve to protect it from injury. The eye ball is embedded in the fat of the orbit but is separated from it by a thin membrane termed capsule of Tenon.

The eye is composed of segments of different sizes. The anterior segment is of a small sphere, it is transparent, and it forms about $\frac{1}{6}$ of the eye ball. It is bounded by the cornea and the lens, and it is further subdivided into anterior and posterior chambers which are incompletely separated by the iris.

The posterior segment which is one of a larger sphere and is opaque, it forms about $\frac{5}{6}$ of the whole circumference of the eye ball.

The term anterior pole is applied to the central point of the anterior curvature of the eye ball, and that of posterior pole to the center of posterior curvature. A line joining the two poles form the optic axis.

The eye ball comprises 3 tunics which are :

- 1) The fibrous tunic consisting of the sclera behind and the cornea in front.
- 2) The vascular pigmented tunic comprising from behind forward the choroid, ciliary body and iris forming together uveal tract.

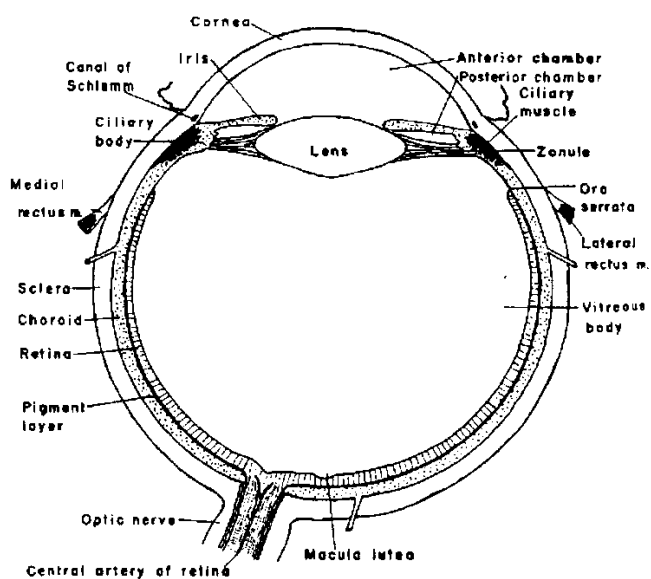


Fig. 1: Diagram of a horizontal meridional section of the eye