



شبكة المعلومات الجامعية

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ



شبكة المعلومات الجامعية
@ ASUNET



شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم



شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكرو فيلم

قسم

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



يجب أن

تحفظ هذه الأفلام بعيدا عن الغبار

في درجة حرارة من ١٥-٢٥ مئوية ورطوبة نسبية من ٢٠-٤٠%

To be Kept away from Dust in Dry Cool place of
15-25- c and relative humidity 20-40%

بعض الوثائق الأصلية تالفة

بالرسالة صفحات لم ترد بالاصل

**DISEASES ASSOCIATED WITH
ECTOPIA LENTIS**

Essay

Submitted in the partial fulfillment of the M.Sc degree
in Ophthalmology

By

Dina Mohamed Said El Fayoumi
M.B., B.Ch.

Supervisors

Prof. DR. EFFAT ALY ABDEL NABI

Professor of Ophthalmology
Cairo University

Prof. DR. MOSTAFA MOSTAFA BAHGAT

Professor of Ophthalmology
Cairo University

DR. AYMAN MOHAMED KHATTAB

Lecturer of Ophthalmology
Cairo University

Cairo University
2002

The first part of the paper discusses the importance of the study of the history of the United States. It is argued that the study of the history of the United States is essential for a full understanding of the country and its people. The second part of the paper discusses the importance of the study of the history of the world. It is argued that the study of the history of the world is essential for a full understanding of the world and its people. The third part of the paper discusses the importance of the study of the history of the United States and the world. It is argued that the study of the history of the United States and the world is essential for a full understanding of the United States and the world.



The first part of the paper discusses the importance of the study of the history of the United States. It is argued that the study of the history of the United States is essential for a full understanding of the country and its people. The second part of the paper discusses the importance of the study of the history of the world. It is argued that the study of the history of the world is essential for a full understanding of the world and its people. The third part of the paper discusses the importance of the study of the history of the United States and the world. It is argued that the study of the history of the United States and the world is essential for a full understanding of the United States and the world.

KEYWORDS

Ectopia lentis – Subluxation – Dislocation – Zonules –
Fibrillins – Exfoliation – Connective tissue disorders –
Lensectomy – Laser zonulysis – Phacoemulsification –
Capsular tension ring.

ABSTRACT

Lens subluxation or ectopia lentis is almost always bilateral (except when traumatic) but often asymmetrical in children. This displacement may progress to dislocation into the anterior or posterior segment. Lens subluxation may be traumatic, hereditary, spontaneous, or iatrogenic.

Ectopia lentis may be managed either conservatively or surgically.

ACKNOWLEDGEMENT

At first I would like to thank GOD the merciful and behold for guiding me produce this work.

I am deeply indebted to Professor Dr. Effat Abdel Nabi for her constant advice, supervision and sincere help.

It is really a pleasure to express by deepest gratitude to Professor Dr. Mostafa Bahgat for his encouragement, indispensable guidance and support.

I really owe much to Dr. Ayman Khattab for his help, constant support and sincere guidance.

At last, but not least, I am much thankful and grateful to all my colleagues who helped me in producing this work.

CONTENTS

	Page
I. Introduction and aim of work	1
II. Review of literature	3
▪ Anatomy of the zonular apparatus	
• Development, origin and synthesis of the zonule	4
• Composition and molecular genetics	7
• Zonular bundle, fiber, and fibril architecture	9
• Ciliary course of the zonule	12
• Ciliary-lens course of the zonule	20
• Zonular insertion of the lens	22
▪ Etiological classification of subluxated lens	
• Trauma	26
• Heredity	27
• Spontaneous	29
• Iatrogenic	30

▪ **Common diseases associated with ectopia lentis**

➤ Disorders of fibrillin metabolism	31
• Marfan syndrome	31
• Weill-Marchesani syndrome	56
• Shprintzen-Goldberg syndrome	60
• Familial ectopia lentis	61
➤ Disorders of metabolism	61
• Homocystinuria	61
• Hyperlysinemia	72
• Molybdenum cofactor defects and sulfite oxidase deficiency	73
➤ Disorders of collagen metabolism	75
• Ehlers-Danlos syndrome	75
• Pseudoxanthoma elasticum	79
• Stickler syndrome	84
• Kniest dysplasia	88
• Spondyloepimetaphyseal dysplasia with joint laxity	89
➤ Developmental disorders	89