

Research Institute of Ophthalmology

2, El - Ahram Street - Giza - Egypt

Tel. : 5717881

Fax & Tel. : 5735688

The President



II. Rotations:

1. First year: General ophthalmology and anterior segment outpatient clinics.
2. Second year: cataract unit (6 months) and Glaucoma unit (6 months)
3. Third years: posterior segment and ocular oncology unit (9 months). Medical and surgical Retina, vitreous and choroid for 6 months and 3 months in ocular oncology and pediatric and strabismus unit (6 months)
4. First 3 months of the fourth year to complete the course of pediatric and strabismus unit.
5. Rest of the fourth year as follow:
 - Neuro-ophthalmology science 3 months
 - Oculoplasty and ocular adenaxal tissue 3 months
 - Higher training for 3 months in one of the following options
 - 3 months training in the specialized vitreo-retinal surgery unit
 - 3 months training in the specialized cornea and refractive unit.
 - 3 months training in another national or international ophthalmology department in one of the recognized hospitals.

The resident training program includes the rotation in the following sections:

I. General ophthalmology and optics:

A) General ophthalmology the target in this department is to achieve a general knowledge that should cover the different aspects of science under direct supervision of his senior residents and the RIO professors of ophthalmology. The resident should be able to detect and diagnose the different disorders of eye including:

Ocular globe

Sclera

Cornea

Iris

Ciliary body and Choroid

Crystalline lens

Vitreous

Retina

Optic nerve head and optic disc

Adenaxal tissue:

Eye lids

Conjunctiva

Lacrimal system

Extraocular muscles

Orbit

Neuro-ophthalmology

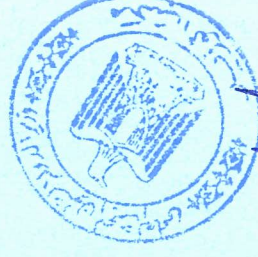
Optic nerve

Optic nerve pathway

Visual centers

Brain centers relates to visual functions

Oculomotor nuclei and centers



M. Safwat

Research Institute of Ophthalmology

2, El - Ahram Street - Giza - Egypt

Tel. : 5717881

Fax & Tel. : 5735688

The President



B) Optics and Refraction: the objective of this part is that the resident study the different properties of the lenses and refraction. The course also includes studying the eye as an optical system and study the optical principle of the different component of this system. He must be able to refract the eye and recognize the different physiological and pathological changes with age, the different ophthalmic instruments and apparatus used in this evaluation and the different concepts of their corrections.

Fundamentals of refraction

Physical properties of convergent, divergent and prism lenses

Error of refraction (myopia, hypermetropia and astigmatism)

Accommodation, presbyopia and aphakia

Optic principles of ophthalmic instruments (autorefractometer, keratometer, slit-lamp biomicroscopy, direct and indirect ophthalmoscopy, tonometry, surgical operating microscope, topography, fundus camera

Anterior segment department: The resident rotation program includes spending 6 months in this department to study the different ocular disorders and their proper diagnosis and managements.

Physiology and pathology of the conjunctiva, sclera, cornea, anterior chamber, iris, pupil, posterior chamber, crystalline lens and ciliary body

Ocular disorders of conjunctiva, sclera, cornea, anterior chamber, iris, pupil, posterior chamber, crystalline lens and ciliary body

Ocular immunology and pharmacology of the anterior segment

Principles of exploration of the anterior segment using the slit-lamp biomicroscopy, tonometry, gonioscopy, topography, perimetry, biometry and corneal pachymetry.

Principles of ophthalmic lasers: YAG, Argon, and diode lasers use in anterior segment.

II. Anterior segment surgery rotation:

The resident will be asked to attend the different ophthalmology polyclinics and participate in the different activity of the unit. As a natural extension of the previous 6 months the training is extended to include all the diseases of the anterior segment, their way of diagnosis and management including the surgical principles. The resident should be able at the end of the first year of his residency to perform a number of surgical interventions. The different procedures include:

Assistant in a minimum number of 30 of each of the following interventions:

Lid surgeries (intropion and extropion)

Pterygium surgery.

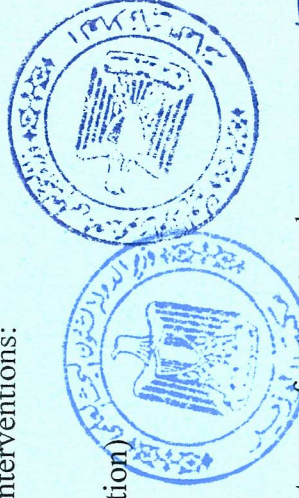
Cataract surgery (extracapsular extraction and phacoemulsification)

Glaucoma

Combined cataract and glaucoma surgery

III. Cataract unit:

In this unit the resident learns how to diagnose and manage all types of cataract and crystalline lens disorders. The aim behind this rotation is to prepare the resident to master all the diagnostic procedures including refraction, biometry and lens imaging



M. Safwat

Research Institute of Ophthalmology

2, El - Ahram Street - Giza - Egypt

Tel. : 5717881

Fax & Tel. : 5735688

The President



diagnostic tools, to be able to medically control all crystalline lens emergencies and to operate the different levels of cataract. The resident receives intensive training concerning the intraocular cataract implants (intraocular lenses) and their use. The surgical training should include the following

Assistant in a minimum number of 30 of each of the following interventions:

Extracapsular cataract extraction surgery (ECCE)

Phacoemulsification

Combined cataract and glaucoma surgery

First surgeon in each of the following following interventions:

Extracapsular cataract extraction surgery (ECCE) in 100 eyes

Phacoemulsification in 100 eyes

Combined cataract and glaucoma surgery in 25 eyes

IV. Glaucoma unit:

In this unit the resident learns how to diagnose and manage all types of glaucoma and anterior chamber angle disorders. The aim behind this rotation is to prepare the resident to master all the diagnostic procedures including tonometry, visual field, visual evoked potential and optic nerve imaging diagnostic tools, to be able to medically and surgically control all grades of glaucoma and its emergencies. The resident receives training concerning the use of laser in glaucoma. The resident receives training concerning the glaucoma implants and their use. The surgical training should include the following

Assistant in a minimum number of 30 of each of the following interventions:

YAG and Argon Laser Iridotomy.

Diode laser cyclophotocoagulation.

Filtering glaucoma surgeries

Non-penetrating glaucoma surgeries

Combined cataract and glaucoma surgery

First surgeon in following interventions:

YAG and Argon Laser Iridotomy in 25 eyes

Diode laser cyclophotocoagulation in 25 eyes

Filtering glaucoma surgeries in 50 eyes

Non-penetrating glaucoma surgeries in 50 eyes

Combined cataract and glaucoma surgery in 25 eyes

V. Posterior segment (Vitreoretinal) and ocular oncology department:

A) Medical retina section: the resident should be able to recognize and differentiate between the normal fundus and different congenital or pathological disorders and dystrophies. Should be able to use the different fundus examination devices including direct and indirect ophthalmoscopy, diagnosis and management of the different ocular disorders occurring at the level of the fundus. Should be able to use the different investigational tools that help him to reach the diagnosis including: colored vision testing, visual field testing ecography, electroretinography, visual evoked potential (VEP) testing, fundus angiography, and OCT



Research Institute of Ophthalmology

2, El - Ahram Street - Giza - Egypt

Tel. : 5717881

Fax & Tel. : 5735688

The President



The training also includes the optical and physical characteristics of fundus ophthalmic lasers and the ability of their use in treating the different ocular pathology.

The resident should perform at least 30 fundus angiography and be able to interpret them

The resident should perform at least 30 Fundus OCT and be able to interpret them

The resident should perform at least 50 Fundus Argon laser therapy for the different ophthalmic disorders.

The resident receives intensive training in low visual aids and their use in management of disorders related to retina and the changes with age

B) Surgical retina section: the resident should be able to diagnose the different disorders that require surgical treatment including:

vitreous detachment, hemorrhage and traction

Retinal tears and retinal detachment

Retinal vascular problems

Central and peripheral retinal degenerations including congenital, senile and pathological ones.

Ocular tumors at the level of the fundus.

Intravitreal injection of air and other different pharmaceuticals

The resident undergoes extensive surgical program including:

Assistant in a minimum number of 25 of each of the following interventions:

Conventional Retinal surgery including buckling and drainage procedures.

Pars plana Vitrectomy.

Retinotomy and retinectomy

First surgeon in a minimum number of 5 of each of the following interventions:

Conventional Retinal surgery including buckling and drainage procedures.

Pars plana Vitrectomy including the use of endo-laser.

C) Ocular oncology: the training includes the pathology and clinical presentation of the different ocular inflammatory disease and ocular tumors. The resident should be able at the end of the rotation to diagnose and treat the different ocular inflammatory and oncological diseases including:

The interpretation of ophthalmic imaging devices including orbit X-ray, CT scan, MRI

Inflammatory process of the orbital structures

Vascular and neurological diseases of the orbit

Ocular tumors.

The resident should assist in at least 10 enucleation procedures and performs 5 as first surgeon.

The resident should assist in at least 10 orbital surgeries including orbital tumors and perform at least one as first surgeon.

VI. Pediatric, Strabismus unit and low visual aids:

The basic medical training included the physiology and anatomy of the extraocular muscles and the different ocular nerves involved in the process. The resident should



Research Institute of Ophthalmology

2, El - Ahram Street - Giza - Egypt

Tel. : 5717881

Fax & Tel. : 5735688

The President



be able to use the different diagnostic tools including prisms, colored charts, synoptophore, Hess chart, the diagnosis and management the different disorders related to strabismus. The resident receives intensive training in low visual aids and their use in management of disorders related to strabismus

Surgical training includes the following:

Assistant in a minimum number of 50 of each of the following interventions:

Extracocular muscle surgery: muscle resection, recession, transposition advancement and reinsertion procedures.

Botulinium toxin injection for ophthalmic use
First surgeon in:

Extracocular muscle surgery: muscle resection, recession, transposition advancement and reinsertion procedures in a minimum number of 75 procedures.

Botulinium toxin injection for ophthalmic use with a minimum number of 20 procedures.

VII. Neuro-ophthalmology unit:

The resident learns the anatomy and physiology of the optic nerve, visual pathway and visual centers. The resident should be able to detect, diagnose and differentiate between the different disorders affecting the optic nerve and its pathway and centers. The interpretation of ophthalmic imaging devices including orbit X-ray, CT scan, MRI and their use as diagnosis tool in neuro-ophthalmology. The training includes the use of different medication and mega doses of steroids. The resident works in cooperation with the posterior segment and oculoplastic surgery department as being parts of the same field.

VIII. Oculoplasty and ocular adnexal tissue unit:

The rotation includes intensive training to stand on the following:

Anatomy, physiology and pathology of different structures of the orbit and its content.

Inflammatory process of the orbital structures

Vascular and neurological diseases of the orbit

Tumors of the orbit.

Bony Orbit and orbital fractures

Orbital decompression

Evasceration procedure

Enculation procedure

The interpretation of ophthalmic imaging devices including dacriocystorrhinograophy, orbit X-ray, CT scan, MRI

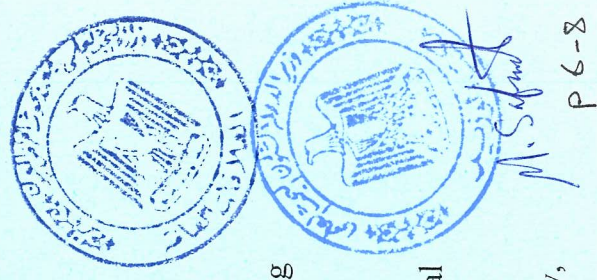
Anatomy, physiology and pathology of different structures of the lids

Lid surgery: blepharoplasty, interption and extropion, disorders of lashes,

Lid tumors and reconstructive procedure of the upper and lower lids and orbital implants

Ptosis surgery

The resident should assist in at least 50 lid surgeries including blepharoplasty, intrepion and extropion, disorders of lashes and perform 25 as first surgeon



Research Institute of Ophthalmology

2, El - Ahram Street - Giza - Egypt

Tel. : 5717881

Fax & Tel. : 5735688

The President



The resident should assist in at least 10 lid tumors and reconstructive procedure of the upper and lower lids and perform 3 as first surgeon.

The resident should assist in at least 25 ptosis surgeries and perform 10 as first surgeon

The resident should assist in at least 25 dacryocystectomies and perform 10 as first surgeon

The resident should assist in at least 10 Evasciation and enculation including orbital implants procedures and perform 5 as first surgeon.

The resident should assist in at least 10 orbital surgeries including orbital fractures and perform at least one as first surgeon.

IX. Higher specialized training:

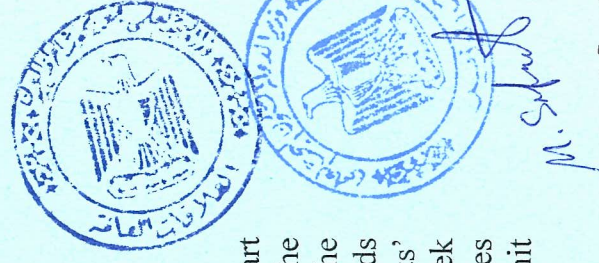
- A) posterior segment (vitreoretinal) unit: additional three months in the department including vitreoretinal clinic, ocular diabetes clinic. The higher surgical training include performance of 20 procedures of retinal detachment procedures and vitrectomy including endo-laser.
- B) Cornea and refractive surgery unit: additional three months in the department including specialized cornea clinic and refractive surgery department. The training includes the diagnosis and management of the complicated cases of conjunctival and corneal infections and dystrophic disorders referred to the hospital. The higher surgical training include:

1. Assistant in a minimum number of 20 each of the following interventions:
 - Keratoplasty
 - Corneal incisional surgery
 - LASIK procedure
 - Intracorneal refractive implants
2. First surgeon in minimum number of 10 each of the following interventions:
 - Keratoplasty
 - Corneal incisional surgery
 - LASIK procedure
 - Intracorneal refractive implants

X. Emergency and nightshifts:

After completing the first 6 months of the residency, the resident is asked to start attending emergency unit and nightshifts together with his senior residents. The nightshift duties are then obligatory for all residents passing to the second year. The emergency service starts daily after completion of the outpatients' clinic and extends to cover overnight service until the next morning where the morning outpatients' clinic starts. Each department covers one emergency unit and nightshifts of the week (6 department and 6 days) the seventh day emergency unit and nightshifts rotates between the departments (one department every 6 weeks). During the emergency unit and nightshifts, the duties of the resident include:

1. Staff rotation in the inpatients' department of the hospital.



Research Institute of Ophthalmology

2, El - Ahram Street - Giza - Egypt

Tel. : 5717881

Fax & Tel. : 5735688

The President



2. Attending and managing the emergency cases.
3. Operative facility to intervene in case ocular emergencies such as
4. Rupture globe
5. Emergency glaucoma and cataract procedures
6. Traumatology
7. Ocular and periocular wounds and incisions
8. Post-operative emergency situations.

XI. Continuous educations:

1. During the years of residency the resident is obliged to attend at least 75 % of the morning session held 4 times each week. The resident is requested to present some of the cases he sees in the clinic at least once each month.
2. The resident is responsible to prepare the round of his department and carry out the discussion of each case in front of the professors in weekly sessions together with his senior residents. The aim of this staff round is to stand on the condition of the patients in the inpatients' part of the hospital and the evolution of their cases. The resident being the resident doctor is responsible to perform all the examinations, investigations and preparations necessary to help the staff for decision-making
3. During the years of residency the resident is obliged to attend at the scientific day of the Research Institute of Ophthalmology as well as the scientific day of Cairo University. The attendance of the annual meeting of Egyptian society of ophthalmology is a must.

Prof. Abdel Aziz Imara M. b. b.
Head of ophth. department 27/3/2004

S. H. Zohri
27-3-2004
Prof. Sherif H. Zohri
Vice President, The Research Institute of Ophthalmology



M. Safwat

Research Institute of Ophthalmology

2, El - Ahram Street - Giza - Egypt

Tel. : 5717881

Fax & Tel. : 5735688

The President

Arab Republic of Egypt

Ministry of higher education and scientific research Research institute of ophthalmology

Certificate

Research Institute of Ophthalmology (RIO) Giza-Cairo, Egypt certifies that Mr. Ahmed Galal Ahmed MD born in Cairo 10/12/1972, passport No. 480715:

1. Has completed the Ophthalmology residency program in the Research Institute of Ophthalmology (RIO) during the period of March 1997 to February 2001 (48 months)
2. During the years of his residency he fulfilled the duties of essential full time resident including the scientific, educational, medical, surgical and emergency duties and training
3. In his last 3 months of the 4th year, he attended his higher specialized training in the department of cornea and refractive surgery.
4. He passed the examination of master degree ophthalmology from Cairo University in Nov 2000 and obtained the degree in Feb 2001 according to the council of Cairo University.

According to the previous, Mr. Ahmed Galal Ahmed MD is recognized as an ophthalmologist in 1/3/2001 by the board of the Research Institute of Ophthalmology (RIO) and he was offered a position of ophthalmologist assistant lecturer in the Research Institute of Ophthalmology (RIO) starting from 1/3/2001. The position will enable him to practice ophthalmic medicine and surgery both in private and public hospitals.

Head of the ophthalmology departments

Professor:

Ahmed

Date: 27 / 3 / 2004

Vice Chairman of the Research Institute of Ophthalmology (RIO)

Professor:

S. M. Zaki

Date: 27 / 3 / 2004

M. Safar

