

# **FELLOWSHIP PROGRAM IN MICRO EAR SURGERY**

## **1. Preamble**

Otology is a growing branch needing special attention. Otological disorders account for a large number of ENT cases, and its outlook has changed with the introduction of the operating microscope. Micro ear surgery has become mandatory for better outcome of patients with disordered ears. Therefore, there is a need for specialized training in micro ear surgery and hence a curriculum to impart hands on training to master the art of use of the microscope and endoscope in the diagnosis and treatment of ear diseases.

## **2. Objectives**

- At the end of training, the student should be able to:
- Diagnose with precision the ear diseases
- Demonstrate the skill in otomicroscopy
- Manage the conditions requiring the restoration of hearing to perfection.
- Develop good technical skills
- Demonstrate skill in otoendoscopy.
- Read and diagnose with precision the disease of Ear.
- Demonstrate competence in basic concepts and research methodologies in otology.

## **3. Duration of the course**

1 year of full time work

## **4. Eligibility**

M.B.B.S. with postgraduate qualification in ENT (DLO/ MS in ENT) / DNB in ENT Number of Candidates: Four candidates per year.

Selection: Selection of candidates will be as per the rules and regulations of KLE University.

1 **Attendance:** 80% attendance

2 **Medium of instruction:** English

3 **Course Content**

Ear

- o Embryology, Anatomy & Physiology of ear.
- o The physical and functional examination of the ear
- o The physical and functional examination of vestibular and cochlear system
- o Tinnitus
- o Affections of external ear
- o Repair of deformities of external ear
- o Congenital conditions of middle ear cleft
- o Traumatic conductive hearing loss
- o Acute inflammations of middle ear cleft
- o Non suppurative otitis media

- o Chronic suppurative otitis media
- o Management of chronic suppurative otitis media
- o Complications of infections of middle ear
- o Tumors of middle ear cleft and temporal bone
- o Diseases of the otic capsule – otosclerosis & other diseases
- o The deaf child
- o Traumatic lesions of inner ear
- o Inflammatory lesions of vestibular and auditory nerve
- o Acoustic neuroma
- o Ototoxicity
- o Presbycusis
- o Vascular lesions of inner ear
- o Diagnosis and management of sudden and fluctuant SNHL
- o Psychoacoustic audiometry, OAE, BERA
- o Prevention of hearing loss
- o Meniere's disease
- o Neurologic aspects of vertigo
- o Facial paralysis
- o Rehabilitation of adults with acquired hearing loss – hearing aids/bone anchored hearing aids
- o Middle ear implants
- o The cochlear implants
- o Nystagmus and electronystagmography
- o Skull base surgery
- o Medical negligence in otology
- o Otoendoscopic procedure & Surgeries

The candidate will attend

- a. Subject Seminar 30hrs
- b. Journal Club 30hrs
- c. Case Presentation 30hrs

The candidate has to maintain a logbook of his day-to-day activities.

Each candidate has to do 06 Temporal Bone dissections during the academic year.

The candidate is expected to attend / present at least one paper in State, Zonal and National conference in Academic year.

Desires to publish / to contribute the project adequate number of Ear surgeries.

OT and ward work to be done on rotation.

The candidate will attend and participate in postgraduate teaching programs of the department of ENT as and when required. To conduct UG clinical teaching to improve

**communication skill and teaching abilities.**

At the end of six months, there will be internal assessment and at the end of one year, there will be a final examination.

### **8. Scheme of Examination**

**Paper - 1:** Basics of otology 100 Marks  
**Paper - 2:** Clinical otology including recent advances 100 Marks  
**Case Presentation + Viva Voce** 200 Marks

**Total number of marks** **400 Marks**

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**A) Theory (2 papers of 100 Marks each)** **200 Marks**

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**10 questions carrying 10 marks in each paper**

**Total = 200 Marks**

**B) Practical Examination** = **200 Marks**

**One long case 70 marks & 2 short case 40 marks each** = **150 Marks**

**Viva- Voce** = **50 Marks**

**1. Osteology** **10 marks**

**2. Radiology** **10 marks**

**3. Audiology** **10 marks**

**4. Instrument** **10 marks**

**5. Surgical Procedure Discussion** **10 marks**

#### **C) Maximum Marks**

<b>Theory</b>	<b>Practical</b>	<b>Viva</b>	<b>Grand Total</b>
200	150	50	400

### **9. Declaration of results**

- a) Passing criteria: 50% marks in both theory and practical examination separately. b) Declaration of Class: 50% and above pass, 65% and above First Class, 75% and above Distinction. c) A candidate who fails will have to appear for reexamination in the following academic year

without repeating the course or courses of instruction.

1 **Books recommended (Latest editions)**

**11. Potential of the course:**

- a. Qualified micro ear surgeons can seek employment in the hospitals in the department of ENT as micro ear surgeons
- b. Set up micro ear surgery clinics
- c. Research in otology / neuro otology/lateral skull base surgery

<b>Sl No</b>	<b>Name of the Book</b>	<b>Author</b>	<b>Publisher</b>
1	Scott Brown's otorhinolaryngology & head and Neck surgery(3vols)	Edited by Michael Gleeson & others; hodder arnold	CRC press Taylor & Francis group
2	Otolaryngology	Michael M. paparella, Shumrick D. A	W. B Saunders co
3	Cummings Otolaryngology, head and Neck Surgery	Charles cummings	Mosby
4	Surgery of the Ear	Glasscock-Shambaugh, Michael E. Glasscock	Gulya A. J; B. C Decker Inc
5	Diseases of the Ear	Harold Ludman, Tony Wright	Arnold Publication
6	Ballenger's Otorhinolaryngology Head and Neck Surgery	J. B Snow; P. Ashley Wackym	C. B. S publishers & distributors Pvt .Ltd B. C Decker Inc. PMPH
7	Temporal Bone surgical Dissection Manual	Ralph A Nelson	House Ear institute, Los Angles, USA
8	Learning Ear surgery by temporal bone dissection	Prof. K.K.Ramalingam, Dr.B.Sreeremamurthy	Chinnamal ENT Medical education & research foundation, Madras

9	Surgical techniques in CSOM & Otosclerosis	Dr. A. Mahadevaiah & Dr. Bhavani Parikh	CBS publishers & distributors Pvt.Ltd
10	Temporal Bone Dissection	Mario-sana	Thieme
11	Tympanotomy, Mastoidectomy, Stapes	Ugo Fisch	Thieme
12	Clinical audio-Vestibulometry	Anirban Biswas	Bhalani Publishers

