

SYLLABUS OF MS ENT

PREAMBLE:

A postgraduate specialist having undergone the required training should be able to recognize the health needs of the community, should be competent to handle effectively the medical problems, and should be aware of the recent advances pertaining to his specialty. The postgraduate student should acquire the basic knowledge, attitude and skills in teaching of medical/para-medical students. He/she also expected to know the principles of research methodology and modes of consulting library including internet use.

Goals:

Patient care ability: A postgraduate in ORL-Head and Neck surgery at the end of its 3 year course should develop proper clinical acumen to interpret diagnostic results and correlate them with symptoms from history taking and become capable to diagnose the common clinical conditions/diseases in the specialty and to manage them effectively with success without making any serious complications and sincerely to take such accurate decision, for the patient's best interest including making a referral to/consultation with a more experienced colleague/professional friend while dealing with any patient with a difficult condition. He/she should be able to create awareness about preventive otolaryngology in the society.

Teaching Ability: He/she also should be able to teach an MBBS student about the commonly encountered conditions in ENT pertaining to their diagnostic features basic pathophysiological aspect and the general and basic management strategies.

Research Ability: He/she should also acquire elementary knowledge about research methodology, including record-keeping methods, and be able to conduct a research enquiry including making a proper analysis and writing a report on its findings.

Team Work: He/she should be capable to work as a team member. He/she should develop general humane approach to patient care with communicating ability with the patient's relatives especially in emergency situation such as in Casualty department while dealing with cancer patients and victims of accident. He/she should also maintain human values with ethical consideration. Play the assigned role in the implementation of National Health Programmes.



Objectives:

A post graduate at the end of a 3 years degree course should acquire the following:

- Cognitive knowledge: Describe embryology, applied anatomy, physiology, pathology, clinical features, diagnostic procedures and the therapeutics including preventive methods. (medical/surgical) pertaining to Otorhinolaryngology- Head & Neck Surgery.
- 2. Clinical decision making ability and management expertise: Diagnose conditions from history taking, clinical evaluation and investigations and develop expertise to manage medically as well as surgically the commonly encountered, disorders and diseases in different areas as follows:

Otology, Neurology & Skull-base Surgery: External, middle and internal ear diseases, deafness including the common complications associated with middle ear inner facial Nerve palsy, tinnitus, vertigo and other conditions such as acoustic neuroma, malignant tumors, glomus tumor and petrous apex cholesteatoma etc. and to be capable of doing early diagnosis of these conditions and also to acquire adequate knowledge about principles of therapy of these diseases.

Rhinology: Able to Diagnose and manage nose and paranasal sinus conditions such as infection, polyps and allergy. Acquire some surgical skills to do septorhinoplasty, septoplasty, functional endoscopic sinus surgery (FESS) Develop capability to do oncologic diagnosis and therapy planning for proper management of such patients in collaboration with radiotherapists and medical oncologists.

Laryngology: Able to diagnose and manage benign lesions of the larynx including voice-disorders and pharyngeal and nasopharyngeal diseases, Viz-adenoids and angiofibroma. Capable to do diagnosis of oncologic conditions such as laryngeal carcinoma and plan its therapy strategies.

Oral cavity/Salivary glands: Learn about Oral cavity and salivary gland diseases, their diagnosis and therapy planning with referral strategies for cancer patients to advanced cancer centers/Hospital.

Head/Neck conditions/diseases: Learn about head and neck diseases including Parotid gland and thyroid diseases, neurogenic tumours and neck space infections/and their management.



Broncho-esophageal region: Learn about broncho-esophageal diseases/disorders such as congenital disorders, diagnosis of Foreign bodies in Wind/food pipes with their management policies. Capable to perform Panendoscopies for oncologic evaluation in the head-neck region, including oesophageal malignancy.

Plastic reconstruction following major head neck surgery & trauma : Acquire general principles of reconstructive surgery and its referral needs.

Advanced Surgical methods: Acquire knowledge about phonosurgery like microlaryngoscopic surgery, palatopharyngoplasty for VPI & Cleft palate, and thyroplasty for voice-disorders.

General principles of newer therapy/Surgery: Newer knowledge about ENT diseases in general, including technological (Laser) and pharmacologic advances (medicines) and newer method of therapy for certain conditions such as Obstructive sleep apnoea syndrome and asthma.

Traumatology & Fawn-maxillary Injury: Acquire knowledge in the management of Traumatology in general and faciomaxillary injury in particular, including nasal fractures. Be capable of doing screening in the community, of the audiological & speech related disabilities, and also to do early identification of malignancies and create its awareness in the community/society to eventually get better cooperation from people in health management.

Radiology: Acquire knowledge about radiology/imaging and to interpret different radiological procedures and imaging in Otolaryngology- Head and Neck and skull base regions. There should be collaboration with Radiology department for such activities.

Audiology &. Rehabilitation: Perform different audiological and neuro-otological tests for diagnosis of audiologic/vestibular disorders/diseases and become capable to interpret these findings and to incorporate their implication in diagnosis and their treatment including the rehabilitative methods in audiology and speech pathology including hearing aids and other assistive and implantable devices.

Psychologic and social aspect: Some elementary knowledge in clinical Psychology and social, work management is to be acquired for management of patients, especially those terminally ill and disable-persons and interacting with their relatives.



- 3. Teaching: acquire to teach an MBBS student in simple and straight forward. language about the common ENT ailment/disorders especially about their signs/symptoms for diagnosis with their general principles of therapy.
- 4. Research: Develop ability to conduct a research enquiry on clinical materials available in Hospital and in the community.
- 5. Patient doctor relation: Develop ability to communicate with the patient and his/her relatives pertaining to the disease condition. Its severity and options available for the treatment/therapy.
- Preventive Aspect: Acquire knowledge about prevention of some conditions especially in children such as middle ear and sinus infection, hereditary deafness and early diagnosis of head-neck malignancy. Hence lie/she should know about the preventive Otorhinolaryngology (ENT).
- 7. Identification of a special areas within the subject: To further develop higher skills within the specialty in a specialised are such as Otology. Neurology, Rhinology, head and neck oncology, skull base surgery and audiological medicine, Resident may identify some area of interest, during the Residency and do fellowship/Senior Residency Programme in one of such areas like Otology.
- 8. Presentation of Seminar/paper: Should develop public speaking ability and should be able to make presentation on disease-conditions/research topics to fellow colleagues in a Seminar/meeting/conference using audiovisual aids.
- Research writing: Should be capable to write case-reports and research papers for publication in scientific journals.
- 10. Team work: Team spirit in patient management, working together in O'PD, OT, ward and sharing responsibility with colleagues such as doctor, nurses and other staff are essential.

 Resident has to develop these attributes through different mechanism of interaction. m



PRACTICAL TRAINING

A Junior Resident doctor, pursuing a P.G. Degree course is expected to perform major and minor surgical procedures independently as well as under supervision of a faculty member/a senior resident.

She/he should be able to do many major operations independently such as: (Few examples only given):

- > Tracheostomy,
- > Tonsillectomy
- Adenoidectomy/grommet insertion,
- Nasal Polypectomy
- Incision/drainage of quinsy/other abscesses,
- S.M.R. & Septoplasty
- Cortical mastoidectomy
- Modified radical Mastoidectomy.

Be able to manage common emergencies like, fracture nasal bone, stridor requiring a tracheostomy,

epistaxis, Subperiosteal abscess, and Peritonsillar abscess.

He/she should be capable to do minor operations independently viz, (Few examples only given)

- Myringotomy and myringoplasty
- Antral washout and nasal biopsy
- Sub-mandibular salivary gland removal
- Biopsy from a neck mass, such as a node
- Direct Laryngoscopy 9850208788
- Nasophayrngoscopy
- Flexible Bronchoscopy and Oesophagoscopy
- Aural polypectomy

He/she should be able to do the following operations under supervision/guidance of senior colleagues/faculty member (Few examples only given):

- > Fibreoptic rigid endoscopy of oesophagus
- intranasal ethmoidectorny



- External ethmoidectomy
- > External fronto ethmoidectomy
- Maxillectomy (Partial and Total)
- > Excision of thyroglossal cyst
- Superficial Parotidectomy
- > Radical block dissection of the neck for metastatic nodes.
- Total Laryngectomy for cancer.
- Laryngofissure
- > Repair of laryngotracheal trauma.
- Ligation external carotid artery

He/she should be able to do under guidance/supervision the following specialised operative procedures (Few examples only given):

- > Facial nerve decompression
- Pinna-Repair (Post-traumatic)
- Surgery of choanal atresia,
- External canal atresia-surgery,
- Functional endoscopic/sinus surgery,
- Stapedectomy
- > Tympanoplasty with mastoid surgery
- Rhinoplasty for cosmetic purposes.
- Fibre-optic bronchoscopy and oesophagoscopy including foreign body removal
- Cryo/Laser surgery in ENT
- ➤ Micorlaryngoscopic voice-surgery for vocal nodules, polyps/ cyst etc
- Phonosurgery for cord palsy including type I thyroplasty.
- Skull base/parapharyngeal space surgery
- Thyroid surgery,
- Laryngo-tracheal stenosis surgical correction,
- Faciomaxillary injury etc.



Duration of Training and Rotation Programmes (ward/OT/OPD) First Year

- Spends 6 (six) months in orientation programme including exposure to Audiology Section and Vestibular Laboratory;
- Learn bedside history taking in ward, OT exposures, casualty, ICU requirement and their visit to related disciplines such as Neurosurgery/Anaesthesia.
- Care of indoor (Medical; preoperative and postoperative) patients for a minimum period of 6 months.
- Attends operation theatre and emergency operations for acclimatization.
- Assists ward rounds and visit other wards with senior colleagues to attend call/consultations from other dept.

Course and Curriculum of M S Otolaryngology (ENT)

Participates in the teaching sessions in ward for bedside clinical aspect in the weekly afternoon

Seminar/Journal Club.

After 6 months of orientation during 2 ½ yrs:

- Attends ENT OPD 3 days a week
- > Discusses problematic cases with the consultant(s) in OPD/ward
- ➤ Attends Operation Room/theatre 3 days a week
- ➤ Attends 3 morning rounds/ week
- Looks after minor O.T by rotation in the OPD area for minor procedures.
- > Care of the indoor patients
- > Attends the weekly Journal Club and seminar and presents the same by rotation.
- > Attends Vertigo Clinic, Otology Clinic, Voice Clinic and Peadiatric Clinic and presents cases
- Participates in discussions including therapy planning etc.
- During the 2 ½ years, the resident must attend the combined Teaching
- ➤ Programme of the Department of Surgery, Neurosurgery and Medicine i.e. Clinical meetings, CPC's of students and staff of the whole hospital.
- Surgicopathological conference in Pathology Department, with surgeons.
- ➤ All kinds of specially prepared lectures by dept faculty or from R.T./Plastic or Neurosurgery depts.
- Visits by rotation the Rural Clinic for community exposures/work experience



- > Does 12 hours emergency duty as per Roster of the deptt.
- Attends lectures by Visiting Faculty to the dept/college from India/abroad,
- ➤ Attends/participate/present papers in State/Zonal/National conferences.
- Actively participate/help in organization of Departmental Workshop, Courses in specialised areas like FESS/Otology, Rhinoplasty, Neurootology and Head-Neck Oncology from time to time.

Research methodology/ Reporting on research

Learns the basics in research methodology and make the thesis protocol with in 4 months of admission.

- Problem oriented record keeping including use of computer.
- > Use of Medical literature search including through Internet use, in the Library.
- > Attends biostatistics classes by arrangement.

Research Report

- Writing including preparation of Protocol for Research/Thesis.
- Writing an abstract/short paper/presentation style (Slide- making & audiovisual aids).
- Preparation of a report on a research project/Thesis.

Humanity/Ethics:

Lectures on humanity including personality development, team spirit and ethical issues in patient Care and human relationship including, public relations, by Psychologist and public relation officers are to be arranged by the deptt./college.

Presentation for the Thesis work

a. Selection of thesis Topic

Subject of thesis will be selected by the candidate under guidance of Faculty which will be approved by the departmental guide and other faculty. The Candidate will be asked to submit the protocol within 4 (Four) month of admission after it is scrutinized by departmental Faculty. It is to be approved by the Central thesis committee of the Institute/College and the ethical considerations are also discussed in such Research Programme committee.

Once the thesis protocol is approved the candidate starts his research work under direct supervision of guide and co-guides. Three/six monthly progress of the thesis will be checked to know the outcomes/or difficulties faced by the Candidate. Candidate will be asked to submit the



thesis 6 months before the final exams. At the discretion of director/rector/thesis committee one month extension may be given to a candidate for submission of the protocol and the final thesis for any valid reason for the delay.

TEACHING METHODS

The following learning methods are to be used for the teaching of the postgraduate students:

- 1. Journal club: 2 hrs duration Paper presentation/discussion once per week (Afternoon).
- 2. Seminar: One seminar every week of one hour duration (morning).
- 3. Lecture/discussion: Lectures on newer topics by Faculty, in place of seminar/as per need.
- 4. Case presentation in the ward and the afternoon Special clinics (such as vertigo/otology/Voice/Peadiatric clinics). Resident will present a clinical case for discussion before a faculty and discussion made pertaining to its management and decision to be recorded in case files.
- 5. Surgicopathological Conference: Special emphasis is made on the surgical pathology and the radiological aspect of the case in the pathology dept. such exercises help the ENT/Pathology/Radiology Residents.
- 6. Combined Round/Grand Round: These exercises are to be done for the hospital once/wk or twice/month involving presentation of unusual or difficult patients. Presentations of cases in clinical combined Round and a clinical series/research data on clinical materials for benefit of all clinicians/Pathologists/other related disciplines once in week or forthrightly in the Grand round.
- Community camps: For rural exposure and also for experiences in preventive aspect in Rural situation/hospital/school, Patient care camps are to be arranged 2-3/year, involving Residents/junior faculty.
- 8. Emergency situation: Casualty duty to be arranged by rotation among the PGs with a Faculty cover daily by rotation.
- 9. Afternoon Clinics:
 - (i) Vertigo Clinic : Once a week.

All the patients of vertigo attending ENT OPD/referred cases are worked up in details by the Junior Residents and are discussed with one/two Faculty and treatment, decided upon.

(ii) Otology Clinic: Once a week.



The ear cases are thoroughly investigated and are discussed by the Junior Residents with the faculty for their management/discussions are made after each case is presented. Audiologist also participated in this clinic.

Post operative ear cases are reviewed by faculty and necessary advise given as and when required.

(iii) Peadiatric otorhino Laryngology Clinic: Once a week.

Pediatric patients with Ear, Nose and Throat diseases are thoroughly investigated and are discussed by the Junior Residents with the faculty for their management.

(iv) Voice Clinic: Once a week.

All the patients having voice problems attending ENT OPD/referred cases are worked up in details by the Junior Residents and are discussed with one/two Faculty and treatment, decided upon. Speech therapist also attends the clinic.

- 10. Bedside clinical training for patient care management and for bedside manners: Daily for ½ to one hour's duration during ward round with faculty and 1-2 hours in the evening by senior resident/Faculty on emergency duty, bedside patient care discussions are to be made. Once a week one Faculty should take a one hour Teaching Round by Rotation of Faculty (4/5such rounds per semester of 6 months).
- 11. Death Cases: Once a month/ once in 3 months the records of such cases are presented by the Senior Residents. The Junior Residents are encouraged to participate actively in the discussion in the presence of Faculty of ENT and hospital administration. This programme helps to take corrective measures as well as to maintain accountability in patient management.
- 12. Clinical teaching: In OPD, Ward rounds, Emergency, ICU and the Operation Theatres: Residents/Senior Residents and Faculty on duty in Respective places make discussion on clinical diagnosis/surgical procedures/ treatment modalities, including post operative care and preparation discharge slip.
- 13. Clinical interaction with audiologists/speech therapist: Clinical interaction with audiologist/ speech therapist pertaining to management of the patients with laudiological/speech problems are to be made/discussion arranged. Audiologic methods and therapy strategies are to be made known to Resident doctors.



- 14. Research Methodology: Courses and Lectures are to be arranged for the residents for language proficiency by humanity teachers besides few lectures on human values and ethical issues in patient care.
- 15. Writing Thesis: Thesis progress is presented once in 3 months and discussion made in the dept. Guides/co-guides are to hear the problems of the candidate; can provide assistance to the student. Progress made or any failure of the candidate may be brought to the notice of college Dean/Principal.
- 16. Cadaveric dissection Lab: Cadaveric temporal bone, Nose & Paranasal Sinuses and head & neck dissections must be arranged in the Departmental Lab and/or in the anatomy department for learning surgical anatomy by dissection as well as for learning different operative procedures under faculty supervision and independently (for middle ear operations using operating microscope and for other head and neck surgical procedures including endoscopic (FESS) sinus surgery using endoscopes during 2nd & 3rd year of Residency on a regular basis before/during exposure of particular batch of students to real operative procedures in patients.
- 17. Community camps: For rural exposure and also for experience in preventive aspects in rural situation/Hospital/School, Patient care camps are to be arranged 2-3/year, involving Residents/Junior faculty.



ASSESSMENT

FORMATIVE ASSESSMENT, during the training programme

END ASSESSMENT, at the end of the training programme

Summative: Final Examination - will have a 75% weightage: Basis Theory/practical examination. Both Formative assessment and Summative assessment will be added together at the time of final examination, and results prepared accordingly.

Postgraduate examination (50% marks for theory and 50% marks for clinical/practical).

The Examination for the degree (MS-ENT) shall consist of:

1. Thesis

2. Theory Examination: 04 Papers

3. Practical Examination: - Clinical, Oral, instruments/specimen/X-rays.

1. Thesis:

Thesis, to be submitted by each candidate at least six months before the theoretical and practical examination. The thesis shall be examined by a minimum of three examiners; one internal and two external examiners, who shall not be the examiners for theory and practical; on the acceptance of the thesis by two examiners, the candidate shall appear for the final examination.

2. Theory Examination: Each paper 100 marks = 3 hours duration

	Sections with marks		
Paper I:	Basic Sciences and Pediatric otolaryngology		
Paper II:	Paper II: Otology and Audiology and Recent Advances		
Paper III:	Rhinology and Recent Advances		
Paper IV: Laryngology and Head-Neck Surgery and Recent Advance			

Minimum Passing marks in each head 40% and aggregate: 50% in all papers



3. Practical Examination:

Sr. No.	Description	Marks	Preparation Time	Assessment Time
1	One long case	100	45 min	30 min
2	Two short cases of 75 marks each	150	20 min each	15 min each
3	Objective structured practical Examination (OSPE)	50		25 min
4	Surgical Instrument, Operative Procedure	25		10 min
5	Radiology including CT Scans and MRI	25		10 min
6	Audiology	25		10 min
7	Specimen and Osteology	15		5 min
8	Dissertation	10		10 min
	Total Practical	400		

Minimum passing marks: 50% separate in clinical and Viva



Basic Sciences:

- 1. Anatomy, Ultrastructure of Human Ear
- 2. Physiology of Hearing
- 3. Physiology of Equilibrium
- 4. Anatomy of the Nose & Paranasal sinuses
- 5. Physiology of Nose and Paranasal sinuses
- 6. Pathophysiology of Ear & Paranasal in Flight and Diving
- 7. Mouth & Related Facio-Maxillary Structure
- 8. Anatomy of Physiology of salivary glands
- 9. Anatomy of Pharynx and Esophagus
- 10. Physiology of Deglutition
- 11. Anatomy of Tracheobronchial tree
- 12. Physiology of Respiration
- 13. Anatomy of Thyroid and Parathyroid Glands
- 14. Physiology of Thyroid and Parthyroid Glands.
- 15. Physiology and Reception of Speech
- 16. Surgical Anatomy of Skull Base.
- 17. Clinical Neuro- Anatomy
- 18. Imaging & Radiology
- 19. Basic Immunology
- 20. Microbiology related to ENT & HEAD, NECK diseases
- 21. Cell Biology
- 22. Principles of Radiotherapy in Head and Neck Cancer
- 23. Principals of Chemotherapy in Head and Neck Cancer
- 24. Principles and use of Nuclear Medicine
- 25. Wound Healing
- 26. Principles of Laser Surgery
- 27. Intensive and High Dependency Care
- 28. Anesthesia in ENT & HEAD, NECK surgery
- 29. Biomaterials
- 30. Medical Negligence in otorhinolaryngology



OTOLOGY-

- 1. Examination of Ear
- 2. Aetiopathology of Inflammatory Conditions of External & Middle Ear
- 3. Pathology of Cochlea
- 4. Pathology of Vestibular system
- 5. Diseases of External Ear
- 6. Ear Trauma
- 7. Plastic Surgery of the Ear
- 8. Acute Superlative Otitis media
- 9. Management of Acute Suppurative otitis media
- 10. Chronic Suppurative otitis Media
- 11. Management of Chronic Suppurative otitis media
- 12. Reconstruction of the Ear
- 13. Complications of Suppurative otitis media
- 14. Otalgia
- 15. Otosclerosis
- 16. Diseases of Temporal Bone
- 17. Sensorineural Hearing loss
- 18. Sudden and Fluctuant Sensorineural Hearing loss
- 19. Vertigo
- 20. Meniere's Diseases
- 21. Ototoxicity
- 22. Vestibular Schwannoma
- 23. Epithelial Tumours of External Auditory Meatus
- 24. Glomus and other Tumours of the Ear
- 25. Disorders of Facial Nerve
- 26. Surgery of the Vestibular system
- 27. Cochlear implants
- 28. Presbycusis
- 29. Implantable Hearing Devises



Rhinology:

- 1. Examination of Nose
- 2. Conditions of External Nose
- 3. Congenital Anomalies of the Nose
- 4. Evaluation of the Nasal Airway and Nasal Challenge
- 5. Abnormalities of Smell
- 6. Mechanism & Treatment of Allergic Rhinitis
- 7. Food Allergy and Intolerance
- 8. Infective Rhinitis and Sinusitis
- 9. Intrinsic Rhinitis
- 10. Nasal Polyps
- 11. The Nasal Septum
- 12. Surgical Management of Sinusitis
- 13. Complications of Sinusitis
- 14. Cerebrospinal Fluid Rhinorrhoea
- 15. The Upper Airways and their relation to the respiratory system
- 16. Fracture of Facial Skeleton
- 17. Rhinoplasty
- 18. Epistaxis
- 19. Snoring and Sleep Apneas
- 20. Non-Healing Granulomas
- 21. Facial pain and Headache
- 22. Aspects of Dental Surgery for Otorhinolaryngology
- 23. Trans-Sphenoid Hypophysectomy
- 24. The orbit
- 25. Neoplasms of Nose and Paranasal sinuses



Laryngology and Head, Neck

- 1. Examination and Endoscopy of the Upper Aero-digestive Tract
- 2. Oral cavity
- 3. Acute and Chronic Infections of Pharynx and Tonsils
- 4. Acute and Chronic Laryngitis
- 5. Disorders of Voice
- 6. Management of obstructed Airway and Tracheostomy
- 7. Trauma & Stenosis of Larynx
- 8. Neurological Affections of Larynx & Pharynx
- 9. Pharyngeal Pouches
- 10. Tumours of the Larynx
- 11. Angiofibroma
- 12. Nasopharynx (the postnasal space)
- 13. Tumours of Oropharynx & Lymphomas of the Head & Neck
- 14. Benign Diseases of Neck
- 15. Malignant neck Diseases
- 16. The Thyroid & Parathyroid Gland
- 17. Non-Neoplastic Salivary Gland diseases
- 18. Benign Salivary Gland Tumours
- 19. Malignant Salivary Gland Tumours
- 20. Tumours of Infratemporal fossa & Parapharyngeal space
- 21. Cysts, Granulomas & Tumours of the Jaw, Nose & Sinuses.
- 22. The Esophagus in Otolaryngology
- 23. Facial Plastic Surgery
- 24. Plastic & Reconstructive surgery of the Head and Neck
- 25. Terminal Care of Patients with head and neck cancer



Audiology

- 1. Acoustics
- 2. Computers in Audiology
- 3. Epidemiology
- 4. Otological Symptoms & Emotional Disturbances
- 5. Clinical Tests of hearing & Balance
- 6. Pharmacological Treatment of Hearing & Balance Disorders
- 7. Legal and ethical Matters
- 8. Prevention of Hearing and Balance Disorders
- 9. Hearing Overview
- 10. Causes of Hearing Disorders
- 11. Noise and The Ear
- 12. Diagnostic Audiometry
- 13. Audio logical Rehabilitation
- 14. Hearing Aids
- 15. Cochlear Implants
- 16. Tactile Aids
- 17. Central Auditory Dysfunction
- 18. Tinnitus
- 19. Overview of Balance
- 20. Causes of Balance Disorders
- 21. Diagnostic Testing of Vestibular System
- 22. Rehabilitation of Balance Disorders



Pediatric Otolaryngology

- 1. Improving Pediatric Otolaryngological consultation
- 2. Genetic Factors and Deafness
- 3. The Causes of Deafness
- 4. Testing Hearing in Children
- 5. Screening and Surveillance for Hearing Impairment in Preschool Children
- 6. Otitis Media with Effusion
- 7. Acute Suppurative Otitis Media in Children
- 8. Chronic Suppurative Otitis Media in Children
- 9. Surgery of Congenital Abnormalities of the External and Middle Ear
- 10. Management of Hearing Impaired child
- 11. Cochlear Implantation in Children
- 12. Vestibular Disorders in Children
- 13. Speech and Language
- 14. Foreign bodies in the Ear and Nose
- 15. Congenital Anomalies of the Nose
- 16. Craniofacial Anomalies
- 17. Nasal Obstruction and Rhinorrhoea in Infants and Children
- 18. Tonsil and Adenoids
- 19. Dental Development Orthodontics, Cleft Lip and Cleft Palate
- 20. Sleep Apnoea
- 21. Steator and Stridor
- 22. Congenital Disorders of Larynx, Trachea and Bronchi
- 23. Stenosis of Larynx
- 24. Acute Laryngeal Infections
- 25. Foreign Bodies in Larynx and Trachea
- 26. Tracheostomy and Decannulation
- 27. Home Care of Tracheostomised Child
- 28. Neonatal Pulmonary disorders
- 29. Diseases of the esophagus in Children
- 30. Branchial Cleft Anomalies, Thyroglossal cysts and fistulae
- 31. Tumours f the Head and neck in Children
- 32. Salivary Glands Disorders in Children
- 33. The drooling child
- 34. Recurrent Respiratory Papillomatosis
- 35. Pediatric Anesthesia