#### 1. GOAL

The broad goal of the teaching of undergraduate students in Otorhinolaryngology is that the undergraduate students have ac-quired adequate knowledge and skills for optimally dealing with common disorders and emergencies and principles of rehabilita-tion of the impaired hearing.

#### 2. OBJECTIVES

# 2.1. Knowledge

At the end of the course, the student should be able to:

- 2.1.1. Describe the basic pathophysiology of common ENT dis-eases and emergencies.
- 2.1.2. Adopt the rational use of commonly used drugs, keeping in mind their adverse reactions.
- 2.1.3. Suggest common investigative procedures and their inter-pretation.

#### 2.2. Skills

At the end of the course, the student should be able to:

- 2.2.1. Examine and diagnose common ENT problems including the pre-malignant and malignant disorders of the head and neck.
- 2.2.2. Manage ENT problems at the first level of care and be able to refer whenever necessary
- 2.2.3. Assist/carry out minor surgical procedures like ear syring-ing, ear dressings, nasal packing etc.
- 2.2.4. Assist in certain procedures such as tracheostomy, endo-scopies and removal of foreign bodies.

# 2.3. Integration

The undergraduate training in ENT will provide an integrated approach towards other disciplines especially neurosciences, oph-thalmology and general surgery

### 3. DEPARTMENTAL OBJECTIVES

At the end of the course, the student will be able to:

- 1. Diagnose and manage the common ENT diseases and emergencies.
- 2. Adopt the rational use of commonly used drugs, keeping in mind their adverse reactions.

3. Suggest common investigative procedures and interpret their results.

#### 4. SYLLABUS

# 4.1. Theory

### 4.1.1. Ear

Bacterial flora, specific antibiotic therapy of upper respiratory infection - Surgical anatomy: external, middle and inner ear - Physi-ology of hearing and vestibular function - Examination of the Ear: Tuning fork tests; hearing assessment in children; broad outline; referred pain in the ear - Congenital conditions of the ear - Dis-eases of the external ear: perichondritis; otitis externa; cerumen; foreign body - Diseases of the middle ear: acute and chronic sup-purative otitis media; Otosclerosis; Cholesteatoma - Audiometry: pure tone; functional examination of inner ear, vestibule, caloric test, positional nystagmus test - Deaf mutism - Meniere's disease - Complications of otitis media: Mastoiditis (acute and chronic) -lateral thrombosis; labyrinthitis; otogenic brain abscess; mastoidec-tomy; Principles - Deafness: types and causes - Facial Nerve and its Disorders - Tumours of External Ear - Tumours of Middle Ear Cleft - Acoustic Neuroma - Rehabilitation of the Hearing impaired- Assessment of Vestibular Functions - Disorders of Vestibular System - Tinnitus

### 4.1.2. Nose and Paranasal Sinuses

Surgical anatomy and physiology of the nose and paranasal sinuses - Symptoms of nasal diseases - Methods of examination of the nose and paranasal sinuses - Congenital Anomalies of Nose -Diseases of the nasal septum : deviation of nasal septum and prin-ciples of management; polyp of the septum - Epistaxis and foreign bodies in nose - Nasal allergy: nasal polyposis - Inflammation of the nose : furunculosis of vestibule of the nose, acute rhinitis - Inflammatory diseases of paranasal sinuses : acute and chronic max-illary sinusitis, frontal sinusitis - Atrophic rhinitis, rhinosporidiosis, rhinoscleroma - Outline of management of benign and malignant tumors or nose and paranasal sinuses

# **4.1.3. Pharynx**

Anatomy of the pharynx: methods of examination - Diseases of the pharynx: adenoids; acute and chronic pharyngitis; diphtheric pharyngitis; acute follicular tonsillitis and differential diagnosis; chronic tonsillitis; tonsillectomy; indication; peritonsillar abscess; retropharyngeal abscess - Broad outline of management of juvenile angiofibroma, and malignant tumors of oropharynx - Tumours of Nasopharynx - Acute and Chronic Pharyngitis - Head and Neck Space Infections - Tumours of Hypopharynx and Pharyngeal Pouch

### 4.1.4. Larynx

Anatomy and functions of the larynx and methods of examina-tion - Hoarseness of voice; stridor; differential diagnosis of respi-ratory obstruction and its management - Inflammatory

lesions of the larynx: acute laryngitis - Vocal cord nodules; laryngeal diph-theria; tuberculosis of the larynx and differential diagnosis - Be-nign and malignant tumors of larynx: classification - Be able to use auroscope, nasal speculum, tongue depressor; tuning fork and head mirror - Conduct CPR (Cardiopulmonary resuscitation) and first aid in newborns, children and adults including endotracheal intu-bation - Maintain airway (endotracheal intubation / tracheostomy / cricothyroidostomy)- Perform syringing of ear - Do nasal packing for epistaxis - Congenital Lesions of Larynx and Stridor - Laryn-gotracheal Trauma; Acute and Chronic Inflammations of Larynx -Laryngeal Paralysis - Voice and speech Disorders - Tracheostomy and Other Procedures for Airway Management - Foreign Bodies of Air Passages

## 4.1.5. Diseases of Oesophagus

Anatomy and Physiology of Oesophagus - Disorders of Oe-sophagus - Dysphagia -Foreign Bodies of Food Passage

### 4.1.6. Recent Advances

Sleep Apnoea Syndrome - Skull base Surgery - Laser Surgery - Cryo Surgery - Radiology in ENT - Radiotherapy in Head and Neck Cancer - Chemotherapy for Head and Neck Cancer - Cleft Lip and Palate - Acquired Immuno Deficiency Syndrome (AIDS ) in ENT - Neck Masses

#### 4.2. Practical

### 4.2.1. Clinical Methods in ENT

### 4.2.2. Operative Surgery

Myringotomy - Mastoid Surgery - Radical Mastoidectomy - Modified Radical Mastoidectomy - Myringoplasty - Proof Punc-ture (Syn. Antral Irrigation) - Intranasal Inferior Meatal Antrostomy - Caidwell-Luc Operation - Submucous Resection of Nasal Septum (SMR Operation) - Septoplasty - Diagnostic Nasal Endo-scopy - Endsocopic Sinus Surgery - Direct Laryngoscopy - Brochoscopy - Oeosphagoscopy - Tonsillectomy - Adenoidectomy

## 4.2.3. Miscellaneous

Instruments in ENT - Syndromes in ENT - Implantation otology- Radiofrequency surgery TN ENT - Hyperbaric Oxygen Therapy in ENT