

III rd PROFESSIONAL - PART – I SYLLABUS

(1) OTO – RHINO – LARYNGOLOGY (ENT) :

Goal :

The broad goal of the teaching of under graduate students in Otorhinolaryngology is that the under graduate students have acquired adequate knowledge and skills for optimally dealing with common disorders and emergencies and principles of rehabilitation of the impaired hearing.

Objectives:**(a) KNOWLEDGE:**

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

- (1) Describe the basic pathophysiology of common Ear Nose and Throat (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 their interpretation.

(b) SKILLS:

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

- (1) examine and diagnose common Ear, Nose and Throat (ENT) problems including the pre-malignant and malignant disorders of the head and neck;
- (2) Manage Ear, Nose and Throat (ENT) problems at the first level of care and be able to refer whenever necessary;
- (3) Assist / Carry out minor surgical procedures like ear syringing, ear dressings; nasal packing etc;
- (4) Assist in certain procedures such as tracheostomy, endoscopies and removal of foreign bodies.

(c) INTEGRATION:

The undergraduate training in Ear, Nose and Throat (ENT) will provide an integrated approach towards other disciplines especially Neuro sciences ophthalmology and general surgery.

Syllabus of Oto Rhino Laryngology (ENT):

Sl. No.	Name of the Unit.	Theory – 70 hours No. of Hours
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NOSE, PARANSASAL SINUSES AND NASOPHARYNX

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| 1) Surgical Anatomy and Physiology of the Nose, paranasal Sinuses and Nasopharynx | 1 |
| 2) Examination of Nasal Passages, Nasopharynx and Paranasal sinuses. | 1 |
| 3) Disease of the Nose: Congenital Malformations, Stenosis of Anterior nares, Posterior Choanal atresia, Dermoid Cyst, injuries, C.S.F. Rhinorrhoea, Oro-antral fistula, Nasal Furunculosis, Vestibulitis. | 2 |
| 4) Diseases of Nasal Septum: Haematoma, Abscess, Ulceration, Perforation, Deviation and Spurs. | 1 |
| 5) Diseases of the Nasal Cavity:
Foreign bodies, Rhinoliths
Acute Rhinitis:
Nonspecific : common cold
Specific: Diphtheria, Lupus, TB, Syphilitic, Leprosy, Rhinosporidiosis,
Other diseases: Rhinoscleroma, Malignant Granuloma, Nasal Allergy, Nasal Polyposis | 2 |
| 6) Epistaxis. | 1 |
| 7) Sinusitis: General Consideration of Acute and Chronic Sinusitis, Diagnosis: & Treatment. Frontal Sinusitis, Ethmoiditis, Sphenoiditis. Acute and Chronic Maxillary Sinusitis. | 2 |
| 8) Complications of Suppurative Sinusitis-Frontal Osteomyelitis, Osteomyelitis of Maxilla, Orbital complication, Intracranial Complications, Secondary effects of Sinusitis. | 2 |
| 9) New Growths and Cysts of the Nose and Sinuses: Papilloma, Angioma, Carcinoma, Sarcoma and simple cysts. | 1 |
| 10) Diseases of the Nasopharynx:- congenital Dermoid, Nasopharyngitis-Acute and Chronic, Adenoids, New growths: Benign Juvenile Angiofibromas, Malignant-Carcinoma. | 1 |

PHARYNX

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| 1) Surgical Anatomy and Applied Physiology, (Pharynx- Oropharynx, Laryngopharynx, Parapharyngeal space). | 1 |
| 2) Examination of the Pharynx. | 1 |
| 3) Diseases of the Pharynx; Foreign bodies, Trauma, Inflammations, - Acute-Non-specific and specific. Vincent's angina. Acute Diphtheritic Pharyngitis. Monilliasis. Chronic non specific Pharyngitis. Specific – Tuberculosis, Syphilis, Leprosy, Rhinoscleroma. | 1 |
| 4) Acute Tonsillitis – Chronic Tonsillitis | 1 |
| 5) Abscesses of the Pharynx. Peritonsillar Abscess, Para Pharyngeal abscess, Acute and Chronic Retropharyngeal abscess, Ludwig's angina. | 1 |
| 6) New growths- Beneign and Malignant. | 1 |

Sl. No.	Name of the Unit.	No.of Hours
EAR SURGICAL ANATOMY AND APPLIED PHYSIOLOGY		
1)	Examination of the Ear: Clinical Examination of the Ear. Functional Examinations – Tests for hearing. Tests for Vertigo and Eustachian tube.	1
2)	Disease of External Ear: Congenital malformations, Affections of the auricles: Perichondritis, Haematoma auris, affections of the External auditory canal – Furuncle, Otitis Externa, Herpes, Myringitis Bullosa, Otomycosis, Wax, Foreign bodies, New growths, Injuries of External Ear and Tympanic Membrane.	2
3)	Acute Inflammations of Middle Ear Cleft. Eustachian Salpingitis-Acute and chronic Acute Catarrhal Otitis media, Acute Suppurative otitis media, Acute Mastoiditis.	2
4)	Chronic Suppurative Otitis media-safe and unsafe.	1
5)	Other types (Non suppurative)Chronic Catarrhal Otitis media, Secretory Otitis media, Otitis Barotrauma, Tuberculous Otitis media, Syphilitic Otitis media.	1
6)	Complications of Suppurative Otitis media; extracranial: Mastoiditis, Mastoid abscess, Petrositis, facial nerve paralysis, Labyrinthitis. Intracranial.	1
7)	Otosclerosis: Etiology, Pathology, Clinical features, management.	1
8)	Prevention of Otitis media and Prevention of complications of Otitis media.	1
9)	Diseases of Inner Ear : Congenital inner ear disorders, Traumatic disorders of the inner ear, ear, Otogenic labyrinthitis, Mumps, Herpes, zoster Oticus, Rubella, Meningitis, deafness.	2
10)	Noise trauma, Drug toxicity, Presbycusis, Meniere's disease, Auditory Nerve tumour.	2
11)	Newgrowths: Middle ear and mastoid: Carcinoma, Glomus Jugulare tumour.	1
12)	Rehabilitation of Deaf and Dumb.	1
LARYNX, TRACHEA AND BRONCHI :		
1)	Surgical Anatomy and applied physiology of Larynx, Trachea and bronchi.	1
2)	Examination of the Larynx and lower respiratory tract	
3)	Diseases of the Larynx-Congenital malformations of Larynx. Foreign bodies in the air passages.	1
4)	Inflammations:- Acute-Non specific simple Laryngitis. Laryngo-Tracheo-Bronchitis. Specific-Diphtheria. Chronic(Non- specific):- Simple Laryngitis, Leukoplakia, Pachydermia and vocal nodules. Specific:-Tuberculosis, Lupus, Syphilis, Scleroma, Leprosy.	1
5)	Functional aphonia.	
6)	STRIDOR	1
7)	New –growths of the Larynx: Beneign, Malignant	1
8)	Tracheostomy : Indications, Technique, after treatment, complications.	1
9)	Endoscopy in ENT – Method, indications of Laryngoscopy and Bronchoscopy.	

OESOPHAGUS :		
1)	Anatomy and Physiology of deglutition, Diseases of Oesophagus, P.V .Syndrome, Cardiospasm. Strictures of Oesophogus- Beneign & Malignant, corrosive burns and carcinoma of Oesophagus.	1
2)	F.B. in food and air Passages Indications and contraindications of Oesophagoscopy. Technique & complications.	1
3)	Neck swellings – Differential diagnosis & Management.	

TEACHING PROGRAMME DURING CLINICAL POSTINGS OF ENT:

Total Time: 30 hours

Sl. No	Name of the Unit.	hours
a)	Surgical anatomy of the Ear, Lecture and Demonstration of dissected temporal bone.	1
b)	Applied physiology of Hearing. Auditory function tests. Demonstration of audiometry test.	2
c)	Applied physiology of Equilibrium Vestibular function tests. Lecture / Demonstration in Otoneurology Dept. using E.N.G.Machine.	2
d)	History taking in ear diseases and clinical examination of the ear. Demonstration.	1
e)	Audiometry – various types of hearing aids.Cochlear Implants. Lecture / Demonstration in speech & hearing Department.	2
f)	Congenital deafness. Causes, prevention and management.	1
g)	Common surgical procedures on the ear Lecture / Video demonstration. Instruments X-Ray.	2
h)	Anatomy and Physiology of Nose & PNS.	1
i)	History taking in the diseases of the Nose and PNS and Clinical Examination of Nose & PNS.	1
j)	Respiratory allergy. Pathology, clinical presentation. Diagnostic tests and specific desensitization. Lecture / Demo. Allergy Clinic, ENT.	1
k)	D.D. of nasal obstruction & Discharge. Disorders of olfaction.	1
l)	Head ache and Facial Pain. D.D.Clinical case demonstration.	1
m)	F.E.S.S. basic principles. Lecture Demo / Video presentation	1
n)	Common surgical procedures on Nose and P.N.S. Lecture / Video / Live operation. Surgical instruments and X-Rays and C.Ts. pertaining to Nose and P.N.S.	2
o)	Anatomy of Pharynx. Physiology of Deglutition.	1
p)	History taking and clinical exam of Pharyngeal diseases.	1
q)	Ultero membraneous lesions of Pharynx.	1
r)	Cancer of oro and Hypopharynx. Recent trends in management.	1
s)	Anatomy of larynx. Physiology of Phonation.	1

Sl. No	Name of the Unit.	hours
t)	History taking and clinical exam. of laryngeal diseases.	1
u)	Hoarseness of Voice. Disorders of voice & speech.	1
v)	Stridor in infancy and childhood	1
w)	Cancer larynx. Aetiology and diagnosis. Recent trends in management / prevention.	1
x)	Per oral endoscopy	1
y)	Tracheostomy. Lecture / Video	1
z)	Common surgical procedures in the throat. Lecture / Video. Surgical instruments and X-Rays pertaining to throat.	2

Books recommended

1. Text book of ENT by Logan & Turner
2. Diseases of ENT by Dr. Ramanjaneyulu
3. Diseases of ENT by Dr. K.K. Ramalingam
4. Diseases of ENT by Maqbool
5. Diseases of ENT by Scoft & Brown

Reference books

1. Shambaugh Ear Surgery
2. North American Clinics of ENT
3. Journal of Otology & Laryngology
4. Indian Journal of Otolaryngology.