

Medical undergraduate training in ENT

General objective

– To acquire knowledge and skills required for the management of ENT related pathologies.

Specific objectives

At the end of the medical curriculum the students should be able to,

1. Apply knowledge in Anatomy and Physiology of the ear, nose and throat to understand ENT diseases.
2. Describe the basic pathogenesis in common ENT related disorders.
3. Investigate, diagnose and manage common ENT related pathologies.
4. Refer patients to specialized ENT care appropriately.
5. Describe the national program for prevention of deafness including the neonatal hearing screening program.
6. Discuss the basic principles in preventing ENT related pathologies.

Main content areas

1. Basic sciences of the Ear, Nose, Throat
2. Clinical assessment/management of a patient with an ENT related disorder.
3. Diseases of the Ear
4. Diseases of the Nose
5. Diseases of the Pharynx/Larynx
6. Diseases of the Neck

Intermediate learning objectives Should be able to -	Content area	Teaching/learning methods	
1.1 Describe the relevant anatomy in ENT	-Ear -Nose & Paranasal sinuses -Pharynx - Larynx - Triangles of the neck / contents - Lymphatic drainage of the neck - Spaces of the neck	Recall- clinical Anatomy lectures Student presentations	A
1.2 Describe the relevant physiology in ENT	- Hearing - Balance - Smell - Deglutition - Phonation	Recall – Physiology lectures Student presentations	A

2.1 Obtain a history on a patient with an ENT disease.	<ul style="list-style-type: none"> - Symptoms of ENT diseases - Extracting information from the BHT - Daily updates - Reference on the condition 	Clinical appointment (Ward classes/ Ward rounds/Theatre)	A
2.2 Perform/observe detailed ENT examination.	<p>Examination techniques – Using otoscope, using tongue depressor, using nasal speculum, examination of lumps, Palpation of the neck, Tuning fork tests.</p> <p>Observe -Fibreoptic laryngoscopy (FOL), Rigid nasal endoscopy (RNE), otoscopy, Using ear microscope (EUM), ear syringing</p>	Clinical appointment (Ward classes/ Ward rounds/Theatre) Skills laboratory sessions	A
2.3 Request/ Interpret relevant investigations	<ul style="list-style-type: none"> - Audiometry - Vestibular function testing - Thyroid function tests 	Clinical appointment (Audiology/vestibular lab) – observe	A
2.4 Refer for adjunct treatment methods	<ul style="list-style-type: none"> -speech therapy - vestibular rehabilitation 	Clinical appointment – observe	A
2.5 Record data accurately	<ul style="list-style-type: none"> - write op notes, maintain BHT, writing diagnosis cards 	Clinical appointment	A
3. Describe diseases of the ear	<ul style="list-style-type: none"> - Prevalence - Etiology - Pathogenesis - Symptoms (earache, ear discharge, tinnitus, vertigo, hearing impairment) - Management - Neonatal screening program 	Lectures Clinical appointment (Ward classes/ Ward rounds/operative theater)	A
3. Describe diseases of the Nose and paranasal sinuses	<ul style="list-style-type: none"> - Prevalence - Etiology 	Lectures	A

	<ul style="list-style-type: none"> - Pathogenesis - Symptoms/signs (nasal obstruction, nasal destruction, rhinorrhea, epistaxis, nasal masses/polyps) - Management <ul style="list-style-type: none"> - Nasal packing 	Clinical appointment (Ward classes/ Ward rounds/theatre) Skills lab sessions	
4. Describe diseases of the larynx	<ul style="list-style-type: none"> - Prevalence - Etiology - Pathogenesis - Symptoms (Change in voice, upper airway obstruction/ stridor) - Management <ul style="list-style-type: none"> - Tracheostomy – indications, procedure, tracheostomy care. 	Lectures Clinical appointment (Ward classes/ Ward rounds/operative theater) Skills lab sessions	A
5. Describe diseases of the Pharynx	<ul style="list-style-type: none"> - Prevalence - Etiology - Pathogenesis - Symptoms (Throat pain incl nonspecific throat pain, dysphagia) - Management <ul style="list-style-type: none"> - Obstructive sleep apnoea - Indications for tonsillectomy, procedure, complications 	Lectures Clinical appointment (Ward classes/ Ward rounds/operative theater)	A
6. Describe diseases of the neck	<ul style="list-style-type: none"> - Prevalence - Etiology - Pathogenesis - Symptoms/signs (lumps, Thyroid, salivary gland pathologies, headache, facial pain) - Management 	Lectures Clinical appointment (Ward classes/ Ward rounds/operative theater)	A

Teaching methods

1. Lectures – 7
2. Skills/Demonstration sessions – 2 sessions (each session for 2 hrs)
 - Examination techniques – otoscopy, use of tongue depression, ear syringing, tracheostomy care
 - Nasal packing
 - Changing Tracheostomy / Suction
3. Clinical appointment – 14 days
 - Ward rounds – presentations by students.
 - Operating theatre – presentation of history, observation, assistance where necessary.
 - Basic sciences - short presentation by each student.
 - Discussions – case based/ problem based.
 - Assessment / end of appointment. - Optional.
 - Special assignments – as decided by the consultant (Students may be given an interesting clinical problem to make a short presentation to their colleagues).
 - Group learning activity – audiometry inspection, speech therapy inspection, Thyroid function tests.
4. Web based poster