Residency Program
Master of Surgery (MS)
Curriculum (Phase-B)

Otolaryngology – Head & Neck Surgery

BANGABANDHU SHEIKH MUJIB MEDICAL UNIVERSITY
Dhaka, Bangladesh
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1. Introduction

A curriculum is a formal plan of educational experience and activities offered to a learner under the guidance of an educational institution. Bangabandhu Sheikh Mujib Medical University (BSMMU) was established in 1998. Master of Surgery (MS) in Otolaryngology curriculum was formulated as Residency program in 2000 and implemented from 2001. For upgradation, this curriculum is revised in 2009.

The mission of BSMMU is to ensure quality health care to the people by improving the educational process continuously and maintaining high standards for certifying Otolaryngologists who acquire the knowledge, skill and attitudes essentials for the provision of quality care, thus attaining a level to make the BSMMU as the centre of excellence.

The university’s core values are assuring people of the highest quality patient care, professionalism and excellence in the practice of evidence based otolaryngology and intellectual drive, following standard evaluation procedures, high quality standard setting and maintaining autonomy to preserve these values.

Certification by the BSMMU recognizes excellence in the discipline of Surgery and its subspecialties and areas of added qualifications. The certification process is administered by (1) establishing training requirements, (2) assessing the credentials of candidates, (3) obtaining substantiation of the clinical competence and professional standing of the candidate by appropriate authorities, (4) developing and conducting examinations for certification. Certificates issued by BSMMU will continue to be valid indefinitely. The prime concern of Department of Otolaryngology- Head and Neck Surgery is to develop its pattern of teaching postgraduate medical education in Otolaryngology and its 4 domains- Otology-Neurotology, Rhinology, Laryngology and Head-Neck Surgery.
2. Goals & Objectives

1. The objective of the MS (Otolaryngology- Head & Neck Surgery) education program is to train students with a comprehensive reference framework of competencies to be achieved by the end of the course so that they can provide the highest quality of patient care.

2. They will conduct research in the field of Otolaryngology to explore and establish the evidence.

3. Trainees may use the curriculum as a source of reference and benchmarking for appreciation of their own training standards and as a source of inspiration to promote positive change where appropriate.

4. Through the MS (Otolaryngology- Head & Neck Surgery) course the trainee will be capable of working as expert consultant, clinical teacher, clinical investigator, good manager and develop and maintain habits of life long learning to further enhance their knowledge, skills and professionalism.

3. Admission Requirements for Phase-B Training

A. Residents who have successfully completed Phase-A training and passed Phase-A Final Examination are eligible for enrolment in the Phase-B Program.

B. Candidates with FCPS in Otolaryngology - Head & Neck Surgery can be enrolled directly into Phase-B of the residency Program.

4.1 Educational Program: (May be organized into Academic Modules)

4.1.1 Applied Basic Medical Sciences
- Applied Medical Sciences related to Otolaryngology with meaningful integration.

4.1.2 Otolaryngology Syllabus

The syllabus includes the cardinal manifestations, definition, epidemiology, etiopathogenesis, genetics, clinical presentation, complications, differential diagnosis, investigations, treatment and prevention and prognosis of all ENT diseases. In addition the trainee should be well versed with all the common and important pediatric ENT diseases, it will also cover the recent advances that have occurred in the field of Otolaryngology.
4.1.3. Basic Courses on: (to be satisfactory completed)
- Research Methodology
- Medical Education

4.2 Phase B Training Rotations:

Academic activities of Students of Phase- B

Doctors undergoing MS (Otolaryngology-Head & Neck Surgery) course will be placed in the department for management of patients and other practical & academic works. Students will attend under mentioned departmental routine academic activities. Residents will be placed in rotation as per unit attachment.

1. Ward round- interactive (history of progress)
2. Operation Theatre
3. Out Patient Department
4. Departmental Morning Session
5. Clinical Meetings
6. Seminars
7. Systemic Lecture Series
8. Specialized Clinic service:
   a. Otology Clinic,
   b. Head- Neck Clinic
   c. Rhinology Clinic
9. Morbidity and Mortality (Quality Assurance) meeting
10. Journal Club
11. Patient Care: Round the Clock.
12. Temporal bone dissection / Cadaveric dissection

5. Teaching and Learning methods

The bulk of learning occurs as a result of clinical experiences (experiential learning, on-the-job learning) and self-directed study. The degree of self-directed learning will increase as trainees became more experienced. Teaching and learning occurs using several methods that range from formal didactic lectures to planned clinical experiences. Aspects covered include knowledge, skills and practices relevant to the discipline in order to achieve specific learning outcomes and competencies.

The theoretical part of the curriculum presents the current body of knowledge necessary for practice. This can be imparted using academic sessions like lectures, tutorials, clinical meetings, case presentation session, literature and presentations, grand teaching rounds, clinico-pathological meetings, morbidity/mortality review meetings. Medical audit, journal clubs, self-directed learning, conference, workshops and seminars.

The learning of the practical procedures is the essence of a curriculum of a subject related to surgery. The present day otolaryngology, being a highly practical skill based speciality that includes a wide range of invasive and interventional skills, requires a systematic, devoted, supervised training program. Faculties directly supervise all clinical
activities of the residents, including those in the operating room, where faculties work closely with the residents to develop surgical skills.

6. Logbook:
Residents are required to maintain a logbook in which entries of academic/professional work done during the period of training should be made on a daily basis, and signed by the supervisor. Completed and duly certified logbook will form a part of the application for appearing in Phase Final Examinations.

7. Research:
Development of research competencies is an important component of the Residency Program curriculum as they are an essential set of skills for effective clinical practice. Undertaking research helps to develop critical thinking and the ability to review medical literature. Every Resident shall carry out work on an assigned research project under the guidance of a recognized supervisor, the project shall be written and submitted in the form of a Thesis.

8. Assessment:
The assessment for certification of the MS degree of the University is comprehensive, integrated and phase-centered attempting to identify attributes expected of specialists for independent practice and lifelong learning and covers cognitive, psychomotor and affective domains. It keeps strict reference to the components, the contents, the competencies and the criteria laid down in the curriculum. Assessment includes both Formative Assessment and Summative (Phase final) Examinations.

8.1. Formative Assessment:
Formative assessment will be conducted throughout the training phases. It will be carried out for tracking the progress of residents, providing feedback, and preparing them for final assessment (Phase completion exams).
There will be Continuous (day-to-day) and Periodic type of formative assessment.

• **Continuous (day-to-day) formative assessment** in classroom and workplace settings provides guide to a resident's learning and a faculty's teaching / learning strategies to ensure formative lesson / training outcomes.

• **Periodic formative assessment** is quasi-formal and is directed to assessing the outcome of a block placement or academic module completion. It is held at the end of Block Placement and Academic Module Completion. The contents of such examinations include **Block Units** of the Training Curriculum and **Academic Module Units** of the Academic Curriculum.

8.1.1. End of Block Assessment (EBA):
End of Block Assessment (EBA) is a periodic formative assessment and is undertaken after completion of each training block, assessing knowledge, skills and attitude of the residents. Components of EBA are written examination, structured clinical Assessment (SCA), medical record review, and logbook assessment. Unsatisfactory block training must be satisfactorily completed to be eligible for phase final examination.
End of Block Assessment (EBA) Sheet:

<table>
<thead>
<tr>
<th>Category of Assessment</th>
<th>Assessment scale (score/grade)</th>
<th>Score/grades achieved</th>
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<tbody>
<tr>
<td>Written examination (Marks 100)</td>
<td>Marks &lt;60% - Unsatisfactory, 60%-80% - Satisfactory, &gt;80% - Excellent</td>
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<tr>
<td>Clinical examination (Marks 100)</td>
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<tr>
<td>Structured clinical Assessment (Marks 50)</td>
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<td>Oral examination (Marks 50)</td>
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<tr>
<td>Log book assessment</td>
<td>Percentage of the tasks completed: &lt;80%-Unsatisfactory, 80%-90%-Satisfactory, &gt;90% - Excellent</td>
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<tr>
<td>Portfolio assessment</td>
<td>Unsatisfactory, Satisfactory, Excellent</td>
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<tr>
<td>Generic skill rating</td>
<td>Unsatisfactory-Two or more roles performed unsatisfactorily or missed, Satisfactory-Most roles performed satisfactorily, Excellent: All roles performed excellently</td>
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<tr>
<td>Roles:</td>
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<td>Medical Expert</td>
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<td>Communicator</td>
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<td>Collaborator</td>
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<td>Manager</td>
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<tr>
<td>Health advocate</td>
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<td>Scholar</td>
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<tr>
<td>Professional</td>
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8.1.2. Formative assessment for Academic modules for Biostatics and Research Methodology and Medical Education to be done in the first nine months of Phase B training. Residents getting unsatisfactory grade must achieve satisfactory grade by appearing the re-evaluation examination to be eligible for the Phase B Final Examination.

8.2. Summative Examination:

The Phase-B Final Examination can be undertaken only after passing the Phase-A Final Examination and after successful completion of Phase-B Training. The Phase-B Final Examination is considered as the exit examination.

Phase Final examinations will have following components:
- Written examination: Paper-1 and Paper-2
- Clinical examination:
- Long case (1) and Short cases (4)
- SCA (10 Stations)

- Oral examination
- Thesis Evaluation

**Phase-B**

(a) Written
1. Paper I (Otology & audiology, Otoneurology & Skull Base and Rhinology & Allergy)
2. Paper II (Throat & Laryngology, Head-Neck oncology, Paediatric Otolaryngology and Recent advances in ENT)

(b) Clinical examination
(c) Oral
(d) Thesis

**Marks distribution**

(a) Written
   Paper I- 100
   Paper II- 100

(b) Clinical  200  Long and Short case (100)
(c) Oral – 100  SCA (10 Stations) (100)
(d) Thesis- 200

Thesis Defenses and Comprehensive Viva-100
Total Marks- 800
Pass marks- 60% in all segments individually.

**Question types and marks:**

Each paper will consist of two groups:

**Group A:**
- 10 short questions (5 marks each)
- These will assess the knowledge of different level and its application.

**Group B:**
- 5 scenario based problem solving questions.(10 marks each).
- These questions should focus to assess the capability of handling clinical problem independently and comprehensively as a specialist

**Marks distribution :**

<table>
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<tr>
<th>Papers</th>
<th>Components</th>
<th>Marks</th>
<th>Total</th>
<th>Grand Total</th>
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8.3. Thesis Evaluation:

**Marks: Thesis writing-200; Defense-100: Marks for acceptance-60% of total.**

- To be evaluated by 3 (three) evaluators:-2 subject specialists and one academician preferably involve in research and teaching research methodology.
- Among the subject specialists one should be external.
- Evaluators should be in the rank of Professor/Associate Professor.
- Supervisor will attend the defense as an observer and may interact only when requested by the evaluators.
- Thesis must be submitted to the controller of Exam not later than 27 months of enrolment in Phase-B.
- Thesis must be sent to the evaluators 2 (Two) weeks prior to assessment date.
- Evaluation will cover Thesis writing and its defense.
- For thesis writing evaluator will mark on its structure, content, flow, scientific value, cohesion, etc.
- For defense - Candidate is expected to defend, justify and relate the work and its findings.
- Assessment must be completed in next 3 months.
- Outcome of the assessment shall be in 4 categories - "Accepted", "Accepted with minor correction", "Accepted with major correction" and "Not Accepted".

8.3.1. Description of terms:

- **Accepted**: Assessors will sign the document and resident will bind it and submit to the Controller of Examinations by 10 days of the examination.

- **Accepted with minor correction**: Minor correction shall include small inclusion/exclusion of section; identified missing references, correction of references and typographical and language problem. This should be corrected and submitted within 2 weeks.

- **Accepted with major correction**: Task is completed as per protocol with acceptable method but some re-analysis of result and corresponding discussion are to be modified. To be corrected, confirmed by Supervisor and submit within 3 (Three) weeks.
- **Not Accepted:** When work is not done as per protocol or method was faulty or require further inclusion or confirmation of study.
- To complete the suggested deficiencies and reappear in defense examination during its next Phase Final Examination.
- Candidate has to submit his/her thesis and sit for examination and pay usual examination fees for the examination.

8.3.2. Residents must submit and appear Thesis defense at notified date and time. However non-acceptance of the Thesis does not bar the resident in appearing the written, clinical and oral exam.

8.4. **Qualifying for MS Degree:**
On passing both the compartments, the candidate will be conferred the degree MS in Otolaryngology-Head & Neck Surgery. If any candidate fails in one compartment he/she will appear in that compartment only in the subsequent Phase-B exam.

9. **Supervision and Training monitoring:**

Training should incorporate the principle of gradually increasing responsibility, and provide each trainee with a sufficient scope, volume and variety of experience in a range of settings that include inpatients, outpatients, emergency and intensive care. All elements of work in training rotation must be supervised with the level of supervision varying depending on the experience of the trainee and the clinical exposure. Outpatient and referral supervision must routinely include the opportunity to personally discuss all cases. As training increasing progresses the trainee should have the opportunity for increasing autonomy, consistent with safe and effective care for the patient. Trainee will at all times have a learned supervisor responsible for overseeing their education. Supervisors are responsible for supervision of learning throughout the program to ensure patient and laboratory safety, service delivery as well as the progress of the resident with learning and performance. They set the lesson plane based on the curriculum undertake appraisal, review progress against curriculum, give feedback on both formative and summative assessments as well as sign the logbook and portfolio. The residents are made aware of their limitations and are encouraged to seek advice and receive help all times.

The Course Coordinator of each department coordinates all training and academic activities of the program in collaboration with the Course Manager. The Course director of each faculty directs guides and manage curricular activities under his/her jurisdiction and is the person to be reported to for all events and performances of the residents and the supervisors.

10. **Curriculum Implementation, Review and Updating:**

Both Supervisors and Residents are expected to have a good knowledge of the curriculum and should use it as a guide for their training program. Since Otolaryngology has historically been rapidly changing specialty the need for review and updating of curricula is evident. The curriculum is specifically designed to guide an educational
process and will continue to be the subject of active redrafting, to reflect changes in both Otolaryngology and educational theory and practice. Residents and Supervisors are encouraged to discuss the curriculum and to feedback on content and issue regarding implementation at Residency Course Director. Review will be time tabled to occur annually for any minor changes to the curriculum. The Curriculum will be reviewed with input from the various subspecialties of Otolaryngology.

Close interaction of the faculty members with the residents during the rotational framework is the key to a successful implementation of the curriculum. The faculty members will be deeply involved in the learning process both in educational activity and in supervised patient care activity during clinical rotations. Moreover they will be a part of assessment process and will thoroughly recommend positive feedback on learning and assessment process so as to achieve rotation specific competency objectives.

11. Detail Content of Learning (The Syllabus):

The educational process in Otolaryngology aims to provide basic knowledge, intellectual, clinical and transferable skills to produce competent specialists in Otolaryngology. These specialists will be capable of providing specialized care of the highest order to patients with otolaryngological disorders in the community as well as clinical tertiary centers. They shall recognize the health needs of the community and carry out professional obligations ethically and keeping their standards by engaging in continuing medical education. The program also aims to introduce the candidate to the basics of scientific medical research.

Course Contents of Phase B

General ENT care:

Fluid and electrolyte Balance
Hypotensive anaesthesia/Local anaesthesia
Post operative care
ENT pharmacology

OTOLOGY:

Year-1

Inflammatory condition of external ear:
Inflammatory condition in middle ear:

Acute otitis media, Otitis media with effusion, Barotraumatic otitis media, Congenital cholestatoma, chronic suppurative otitis media, Healed otitis media, Eustacian tube dysfunction, Otalgia.

Otological Surgery of middle ear
   Tympanoplasty
   Canal wall down mastoidectomy
   Atticotomy
   Modified radical mastoidectomy
   Radical mastoidectomy
   Canal wall up mastoidectomy
   Cortical mastoidectomy
   Stapes surgery
   Ear trauma:
      Traumatic perforation of the tympanic membrane
      Blast injury
      Radiation injury
      Surgical trauma of chorda tympanic nerve and facial nerve
      Fracture temporal bone
      Whiplash
      Labyrinthine trauma in tympanoplasty, Traumatic disconnection of ossicular chain

Radiology and Imaging in Otology
   Plain X-Ray of temporal bone.
   Computerized tomography
   MRI, Magnetic resonance angiogram/venogram, Angiography

Year-2
   1. Congenital condition of the auricle
   2. Tumours in external ear, middle ear & inner ear:
      Exostosis & osteoma of external auditory meatus
   3. Congenital meatal atresia and stenosis:
      Acquired meatal atresia and stenosis, Radio necrosis
   4. Otologic surgery of middle ear
      Combine approach tympanoplasty
      Revision mastoidectomy
      Reconstruction of ossicular chain
      Disorder of facial nerve
   5. Complications of AOM/COM
   6. Otosclerosis
   8. Labyrinthine fistula
   9. Migraine
   10. Sensorineural hearing loss
   11. Sudden SNHL
12. Noise induced hearing loss, presbycusis, psychogenic deafness
13. BPPV, Vestibular neuronitis.
15. Meniere’s disease
16. Ototoxicity
17. Hearing Aids and Cochlear Implants

**Year-3**

1. Biomaterials used in ossiculoplasty
2. Diseases of temporal bone
3. Autoimmune inner ear diseases
4. Temporal arteritis
5. Congenital middle ear abnormalities.
6. Sensorineural hearing loss-Bilateral SNHL, Unilateral SNHL
7. Nystagmus
8. Vestibular Schwannoma
9. Tumours of middle ear
10. Glomus tumours of ear
11. Plastic surgery in ear
12. Syndrome of hearing deafness

**AUDIOLOGY CURRICULUM**

**Year-1:**

• Basic acoustics, physiology of hearing
• Principles of different audiological tests e.g., PTA, Tympanometry, SRT, OAE, ABR, ASSR.
• The physiology of equilibrium and its application to the dizzy patient.
• Audio-vestibular evaluation of otologic diseases.
• Audiometric tests for characterizing hearing loss.
• Assessment of hearing, testing hearing in children.
• Screening and surveillance of hearing impairment in preschool child.

**Year-2:**

• Hearing loss-classification, conductive hearing loss and management sensory neural hearing loss & management, psychogenic hearing loss
• Epidemiology of hearing impairment.
• Pharmacological treatment of hearing and balance disorder.
• Rehabilitation of hearing impaired.
• Rehabilitation & management of balance & vestibular disorder.
**Year-3:**

- Prevention of hearing & balance disorder.
- Social & legal aspect of hearing loss.

**RHINOLOGY CURRICULUM**

**Year-1**

Imaging in rhinology: Imaging of nose & paranasal sinuses with detailed study of radiological anatomy.

Diseases/ disorders/ conditions:
- Inflammatory diseases of Nose and Paranasal Sinuses:
  - Classification and differential diagnosis of rhinosinusitis.
  - Bacterial rhinosinusitis.
  - Specific chronic infection of nose.
- Medical management of Chr. Rhinosinusitis.
- Surgical management of Chr. Rhinosinusitis.
- Complication of rhinosinusitis.
- Diseases of nasal septum.
- The nasal polyposis.
- Nasal obstruction (Septal, turbinate, nasal valve)
- Epistaxis.
- Medical negligence in rhinology.

Procedures:
- Nasal endoscopy and detailed endoscopic anatomy of nose, sinus & nasophyrnx.
- Measurement of nasal airway.
- Removal of foreign body from nose.
- Septal surgery.
- Nasal packing with different types of materials.
- Surgical management of enlarged turbinates.
- EES (Endonasal Endoscopic Surgery) - Uncinactomy, middle meatalantrostomy and anterior ethmoidectomy, medial maxillectomy, reduction of concha bullosa.
- Lavage of maxillary sinus.

**Year-2**

Diseases/ disorders/ conditions:
- Allergic rhinitis
- Non-allergic perennial rhinitis.
- Atrophic rhinitis.
- Vasomotor rhinitis.
- Occupational rhinitis.
- Hormonal rhinitis.
- Fungal sinusitis.
- Mucocoele of paranasal sinuses.
- The frontal sinus and its pathology.
- Abnormalities of smell.
Benign condition of nasophyrynx.
Nasopharyngeal carcinoma.
Malignancy of nose and sinuses.
Complications of paranasal sinus surgeries.

**Procedures:**
- EES: Posterior ethmoidectomy, Sphenoidotomy, adenoidectomy, endoscopic DCR.
- Traditional and endoscopic excision of nasopharyngeal angiofibroma
- Image guidance in endonasal endoscopic surgery of nose, nasopharynx, sinuses and skull base.
- Lateral rhinotomy.
- Intranasal antrostomy.
- Caldwell-Luc operation.
- Repair of oroantral fistula.
- Maxillectomy - partial, total, radical.

**Year-3**

Diseases/disorders/conditions:
- Nasal deformities
- Fracture of facial skeleton
- Granulomatous conditions of nose.
- CSF rhinorrhoea, Grave’s exophthalmia, Dasryocystitis.
- Pituitary tumours.
- Obstructive sleep apnoea.
- Cleft lip.
- Cleft palate.

**Procedures:**
- Management of fracture of maxilla, mandible, zygomatic process and zygomatic bone and blowout fracture of orbit.
- Rhinoplasty.
- Ligation of the maxillary artery
- Ligation of the ethmoid artery.
- Osteoplastic flap in frontal sinus surgery.
- Orbital and optic N Decompression (endoscopic)
- Endoscopic repair of CSF leakage.
- Endoscopic approach to frontal sinus.
- Surgical management of snoring/Obstructive sleep apnoea.

**Laryngology**

**Year-1**

2. Physiology of laryngology: Respiration, Phonation, Swallowing- dysphagia, aspiration, odynophagia, Airway protection, Laryngophangeal reflux.
3. Endoscopic procedure: Fiberoptic examination, Stroboscopy, Direct (Operative) Laryngoscopy, EMG.
4. Radiology & Imaging of laryngology like plain X-Ray, CT Scan, MRI, PET/CT, Angiography/embolization.

5. Diseases disorder and condition in laryngology like inflammatory condition, congenital benign neoplasm.

6. Others disorders like a neurological, structural, foreign body.

7. Surgical concept (Specific surgical procedure) like tonsillectomy, adenoidectomy, incision and drainage of abscess

**Year-2**

1. Surgical concept (Specific surgical procedure) like internal/Endoscopic procedure, direct laryngoscopy, vocal fold surgery, laser surgery.

2. Tracheostomy.

**Year-3**

1. Surgical management of the larynx and trachea
   a. External surgical approaches
      i) Laryngofissure
      ii) Laryngeal framework surgery
         a) Thyroplasty types 1 to 4
         b) Arytenoid repositioning surgery
   b. Internal/endoscopic approaches
      i) Fiberoptic flexible laryngoscopy
         a) Therapeutic
            i) Injection
            ii) Foreign body removal
            iii) Other
      ii) Direct laryngoscopy
         a) Suspension surgical laryngoscopy
         a. Micro-suspension surgical laryngoscopy
      iii) Vocal fold surgery
         a) Injection
         b) Injection augmentation
         c) Incisional biopsy
         d) Excisional biopsy
         e) Stripping
      iv) Laser Surgery
         a) CO₂
         v) Microdebrider surgery
   c. Tracheostomy
2. Surgical management of oropharynx, hypopharynx, & cervical oesophagus
   i) Tonsillectomy
   ii) Incision and drainage of abscess
   iii) Pharyngoplasty
   iv) Oesophagoscopy

Head and Neck Curriculum

**Year-1**

History

- Contents:
  - History of present illness
  - Medical history
  - Social history
  - Risk factors
  - Family history
  - Surgical/Radiation/Chemotherapy history
  - Medications
  - Supportive resources/health care providers

- Physical Examination

  - Contents:
    - General examination (weight, vital signs, Karnofsky status, etc.)
    - Oral cavity/oropharynx (including bimanual palpation)
    - Pharynx/larynx (including endoscopy and mirror examinations), flexible fiberoptic laryngoscopy, transnasaloesophagoscopy
    - Salivary gland (parotid/submandibular etc.)
    - Neck/thyroid gland
    - Face and scalp
    - CN II-XII
    - Other

- Diagnostic and Therapeutic imaging

  - Contents:
    - Plain X-rays
    - CT Scan with/without contrast
    - Diagnostic ultrasound of the thyroid and neck
    - MRI scan with/without contrast, T1 and T2 weighted images
    - PET/CT
    - Angiography/embolization
• Staging of Head and Neck Cancer

  ➢ Contents:
    • Staging criteria for SCC of the oral cavity, oropharynx, nasopharynx, larynx and hypopharynx
    • Staging schema for metastatic SCC of the neck
    • Staging criteria for differentiated thyroid cancer.
    • Staging criteria for malignant tumors of the major salivary glands.

• Preoperative and Postoperative Care

  ➢ Contents:
    • Review the assessment of medical co-morbidities, methods of optimization and appropriate medical consultative services.
    • Anticoagulant therapy for DVT prophylaxis, insulin use to control postoperative hyperglycemia, antibiotic prophylaxis, fluid replacement, enteral feedings in patients who are tube fed.

• Diseases, Disorders and Conditions

  ➢ Contents:
    • Lip and Oral cavity
    • Mandible
    • Oropharynx
    • Nasopharynx
    • Hypopharynx and cervical esophagus
    • Larynx
    • Neck mass
    • Salivary glands
    • Thyroid
    • Parathyroids
    • Unknown primary
    • Cervical metastasis/lymphoma
    • Scalp and facial skin
    • Unusual tumors of head and neck
      a. Vascular
      b. Soft tissue sarcomas
      c. Bone tumors
      d. Pediatric

• Surgical Concepts

  ➢ Contents (Specific Surgical Procedures):
• Oral cavity
  i. Partial/total glossectomy (anterior 2/3’s)
  ii. Partial/total glossectomy (base of tongue)
  iii. Floor of mouth resection
  iv. Marginal/partial/total mandibulectomy
  v. Mandibulotomy

• Neck
  i. Neck incisions
  ii. Radical/modified radical neck dissection (including posterolateral and supraclavicular dissection)/selective neck dissections
  iii. Cervical/scalene node biopsy
  iv. Drainage of deep neck abscess
  v. Management of penetratory neck injuries

• Pharynx, trachea, parapharyngeal space
  i. Tracheotomy

• Thyroid/Parathyroid
  i. Thyroid lobectomy/subtotal/total thyroidectomy (including paratracheal and/or superior mediastinal lymph node dissection

• Salivary glands
  i. Parotidectomy
  ii. Submandibular gland excision
  iii. Sublingual gland excision/Ranula marsupialization
  iv. Salivary gland trauma management/ductal repair
  v. Sialolith resection

• Endoscopy
  i. Direct laryngoscopy (fiberoptic and rigid)

• Miscellaneous
  i. Incisional/excisional biopsy
  ii. Needle biopsy (guided & unguided)/puch biopsy
  iii. Endoscopic biopsy
Anaesthesia for Head and Neck Procedures

Contents:

- Review the current risk assessment schema for general anesthesia including techniques of tracheal intubation: nasotracheal, endotracheal, tracheotomy, cricothyrotomy, laryngeal mask anesthesia
- Pharmacology of commonly used local topical anesthetics.

Diseases, Disorders and Conditions

Contents:

- Lip and Oral cavity
- Mandible
- Oropharynx
- Nasopharynx
- Hypopharynx and cervical esophagus
- Larynx
- Neck mass
- Salivary glands
- Thyroid
- Parathyroids
- Unknown primary
- Cervical metastasis/lymphoma
- Scalp and facial skin
- Unusual tumors of head and neck
  - Vascular
  - Soft tissue sarcomas
  - Bone tumors
  - Pediatric

Surgical Concepts

Contents (Specific Surgical Procedures):

- Oral cavity
  - Mandible plating
  - Dental extraction
  - Resection hard/soft palate
  - Mandibular reconstruction
- Nose and maxilla
  - Rhinectomy/forehead flap reconstruction
  - Lateral rhinotomy/midfacialdegloving/alotomy
  - Maxillectomy/medial maxillectomy
  - Nasopharyngeal tumor resection
• Larynx
  i. Laryngofissure and cordectomy
  ii. Vertical partial laryngectomy
  iii. Supraglottic laryngectomy/supracricoid partial laryngectomy
  iv. Total/near-total laryngectomy
  v. Pharyngolaryngectomy
  vi. Traheoesophageal shunt
  vii. Recurrent laryngeal nerve surgery
• Pharynx, trachea, parapharyngeal space
  i. Tracheal reconstruction
  ii. Cricopharyngeal myotomy/myectomy
  iii. Partial/total pharyngectomy
  iv. Pharyngeal reconstruction
• Thyroid/Parathyroid
  ii. Parathyroidectomy (with autotransplantation)
  iii. Recurrent hyperparathyroidism/cancer of the parathyroid
• Endoscopy
  ii. Esophagoscopy (diagnostic, foreign body removal, dilation)
  iii. Bronchoscopy (diagnostic, foreign body removal, dilation, laser, fiberoptic)

Year-3

Diseases, Disorders and Conditions

Contents:
• Lip and Oral cavity
• Mandible
• Oropharynx
• Nasopharynx
• Hypopharynx and cervical esophagus
• Larynx
• Neck mass
• Salivary glands
• Thyroid
• Parathyroid
• Unknown primary
• Cervical metastasis/lymphoma
• Scalp and facial skin
• Unusual tumors of head and neck
  i. Vascular
  j. Soft tissue sarcomas
  k. Bone tumors
  l. Pediatric

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Surgical Concepts

Contents (Specific Surgical Procedures):

- Lips
  i. Vermilionectomy
  ii. Wedge excision/reconstruction
  iii. Upper lip resection/reconstruction
  iv. Lower lip resection/reconstruction
- Oral cavity
  x. Intraoral reconstruction
- Nose and maxilla
  v. Craniofacial resection
- Pharynx, trachea, parapharyngeal space
  ii. Cervical esophagectomy
  iii. Revision stenotic tracheostoma
- Endoscopy
  iv. Laser/cold knife microlaryngeal surgery/arytenoidectomy