

HEAD AND NECK

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TOPICS COVERED IN THIS MODULE

- Malignant and non-malignant conditions of the head and neck

RATIONALE AND COMPETENCIES

The management of head and neck conditions, both malignant and non-malignant is a core element of the Otolaryngology, Head and Neck program. Trainees are required to have a high level of knowledge of investigations, differential diagnosis, potential risks and/or complications and appropriate management strategies.

The graduating trainee will be able to:

- Competently manage all common head and neck conditions
- Assess a patient with a head and neck malignancy. Perform pre-operative assessment, postoperative and rehabilitation management
- Collaborate with other professionals in the selection and use of various types of treatments
- Demonstrate a knowledge of quality of life issues
- Advocate a preventative approach to carcinogenic materials

MODULE CONTENT AND OBJECTIVES

There are two components of this module:

1. Basic Sciences
2. Clinical Knowledge, Skills and Judgement

1. Basic Sciences

- Describe in detail the anatomy (including embryology) of oral cavity, lips, jaws and tongue, oro-pharynx, naso-pharynx, hypo-pharynx, tracheo-bronchial tree, larynx, cervical oesophagus, soft tissues of the neck, thyroid, para-thyroid gland, salivary glands
- Explain the physiology of swallowing, voice production, taste, salivation, upper airway breathing, thyroid and para-thyroid gland
- Discuss nutrition in head and neck disease
- Recognize and describe pathology of the head and neck including:
 - Tumours – benign and malignant
 - Mucosal
 - Skin
 - Salivary glands
 - Thyroid

- Neurogenic
- Vascular
- Sarcoma
- Other soft tissue diseases
- Bone and teeth
- Infections
 - Neck spaces
 - Skin and soft tissue
 - Salivary glands including sialolithiasis
 - Thyroid
 - Bone and teeth
 - Laryngopharynx
- Trauma – blunt and penetrating
 - Facial fractures
 - Blunt and penetrating neck injuries
 - Visceral
 - Vascular
 - Neural
 - Intubation injuries and their sequelae
- Head and neck manifestations of systemic diseases
- Gastro-oesophageal/laryngopharyngeal reflux
- Describe, interpret and evaluate diagnostic imaging of the head and neck including:
 - Plain x-rays
 - CT scanning
 - MRI
 - PET
 - Contrast/interventional studies
 - Nuclear
 - Ultrasound
 - Video stroboscopy
- Understand the utility and technique of FNAB
- Interpretation of pathology results:
 - Haematology
 - Cytology
 - Anatomical pathology
- Use and explain the principles of the following as related to head and neck:
 - molecular biology
 - immunology
 - genetics

- epidemiology
- statistics
- carcinogenesis
- the benefits and deficiencies of staging systems
- laser physics and safety
- radiation physics
- antibiotics
- chemo-therapeutic agents

2. Clinical Knowledge, Skills and Judgement

- Assess and manage all common benign head and neck conditions
- Evaluate and stage a patient with head and neck cancer
- Order and accurately interpret diagnostic tests
- Provide test information to patients in ways that lead to informed decision making
- Demonstrate proficiency in safely carrying out the following surgical procedures:
 - Endoscopic
 - Laryngoscopy direct +/- biopsy
 - Micro-laryngoscopy +/- biopsy
 - Laryngeal Papillomatosis removal
 - Vocal Cord Lesion resection
 - Vocal Cord Medialisation
 - Endoscopic management Pharyngeal Pouch
 - Oesophagoscopy & foreign body removal
 - Oesophagoscopy +/- biopsy
 - Bronchoscopy & foreign body removal
 - Bronchoscopy +/- biopsy
 - Panendoscopy/tumour evaluation +/- biopsy
 - Biopsy of solid tumour
 - Non endoscopic/open
 - Tonsillectomy
 - Quinsy Tonsillectomy
 - Adenoidectomy
 - UPPP
 - Tonsillar/Adenoid haemorrhage control
 - Submandibular Duct transposition
 - Submandibular Gland excision
 - Parotidectomy - superficial and total
 - Neck cyst excision – Branchial, thyroglossal duct, lymphangioma
 - Parapharyngeal space tumour excision

- Pharyngeal pouch
- Lymph Node biopsy
- Neck dissection - selective, comprehensive, radical and extended
- Neck major blood vessel ligation
- Neck abscess drainage – large and small
- Tracheostomy
- Total laryngectomy
- Tracheostoma revision
- External laryngeal surgery – laryngofissure, thyroplasty, arytenoid surgery
- Thyroidectomy total/ hemi
- Parathyroidectomy
- Pharyngolaryngectomy – total and partial
- Intra-oral tumour excision
- Transcervical excision of oral and oropharyngeal tumours
- Mandibulectomy – total/ segmental/ marginal
- Defect reconstruction – skin graft, local flap, pedicle flap, free flap
- Lateral Rhinotomy
- Medial Maxillectomy
- Total Maxillectomy
- Angiofibroma external approaches
- Oral laceration repair
- Lysis Tongue tie
- Nasopharyngeal biopsy
- Oro-antral fistula repair
- Discuss the following procedures:
 - Endoscopic
 - Laryngectomy partial resection – Laser
 - Pharyngectomy partial resection – Laser
 - Arytenoidectomy resection – Laser
 - Non endoscopic
 - Genial tubercle advancement
 - Tracheal resection
 - Laryngectomy supracricoid, hemi vertical and supraglottic
 - Hyoid suspension
 - Tumor resection lingual release
 - Orbital exenteration
 - Defect reconstruction free flap
 - Cranio-facial resection
- Manage any complications of the above procedures

- Plan, implement and manage pre and post-operative care of the head and neck surgical patient
- Recognize the role of adjuvant therapy in the management of head and neck cancer

SUGGESTED READINGS

- Comprehensive management of head and neck tumours (2 volumes), Thawley, S, Panje, W, and Batsakis, J. (editor)
- Tumours of the head and neck, Batsakis, J.
- Otolaryngology, head and neck surgery, Cummings, C.

JOURNALS

Current national and international head and neck journals including:

- Head and neck - <http://www3.interscience.wiley.com/cgi-bin/jhome/38137>
- Laryngoscope-
<http://www.laryngoscope.com/pt/re/laryngoscope/currenttoc.htm;jsessionid=AcqxmRi9IIWuRBeVsQWfqjnwkkhSjx1xbQqMROdkjHUQktOmET6c!-47717630!-949856032!9001!-1>
- Clinics of North America -
<http://info.med.yale.edu/library/sir/openjournals/clinicsna.html>

DELIVERY OF THIS MODULE

- On-line
- Local training sessions

ASSESSMENT METHODS

- Logbooks
- Examinations