



MEDICINE AND SURGERY

Course: HEAD AND NECK

Year: 3rd

Period: 2nd semester

Credits: 8

Objectives

- to understand the basic pathophysiologic mechanisms of diseases of the Head & Neck;
- to be able to recognize the clinical manifestations of the most relevant diseases of the Head & Neck;
- to perform a thorough anamnesis and discuss the appropriate diagnostic flow-chart;
- to recognize emergencies;
- to name the most relevant therapeutic strategies.

Prerequisites

- knowledge of the regional anatomy and histology of the Head & Neck: eyes, ears (external, middle, inner), nose and paranasal sinuses, temporal bone and cranial base, oral cavity, oropharynx and hypopharynx, cervical esophagus, larynx, trachea, salivary glands, thyroid and parathyroid glands, neck muscles, vessels, lymph nodes and fascias;
- knowledge of the vascularization and innervation of the main organs and systems of the Head & Neck;
- knowledge of the physiology of the main organs and systems of the Head & Neck.

Contents

ANATOMY MODULE

Lecture 1 and 2: Larynx and pharynx

Lecture 3: Cranial nerves

PHYSIOLOGY MODULE

Lectures 1 and 2 - Flipped classroom: Sensory systems in head and neck

Lecture 3: Vestibular physiopathology – posture – balance – vertigo – nausea

Lecture 4: The control of eye movements and visceral reflexes

Lecture 5: The bulbar apparatus – cough – swallowing – vomit – vocalization

Lecture 6: Facial motility – Emotions – Mimic movements – Mastication

ORAL DISEASES MODULE

Lecture 1: Introduction: diseases of the oral cavity

Lecture 2: Natural history of periodontal tissue diseases: gingivitis and periodontitis

Lecture 3: Natural history of dental caries

Lecture 4: Periodontal medicine

Lecture 5: The impacted teeth and acute inflammatory disorders

Lecture 6: Diseases of the oral mucosa

Lecture 7: Bleeding of the oral cavity, dental trauma and oral pain

Lecture 8: Prophylaxis and prevention of caries and periodontal diseases

Lecture 9: Dental therapies: state of the art



Lecture 10: Clinical Cases discussion

OPHTHALMOLOGY MODULE

Lecture 1: The basic of an ophthalmological examination and the available technology;

Red eye and ocular inflammation: the differential diagnosis

Lecture 2: Posterior segment diagnostics: ocular fundus, visual field and other diagnostic systems - the meaning and usefulness for non-ophthalmologist

Lecture 3: What is a refractive defect and its possible correction

Lecture 4: Retinal detachment - epiretinal traction

Lecture 5: Cataract etiopathology, classification, diagnosis and treatment

Lecture 6: Glaucoma, optic and other neuropathies

Lecture 7: Diabetic retinopathy and retinal vascular diseases (arterial occlusion and venous occlusion, choroidal vasculopathy), age related macular degeneration and other retinal and uveal pathologies;

The eye and systemic diseases

Lecture 8: Corneal and conjunctival infection

Lecture 9: Orbit tumors, eyelid pathologies and ocular swelling

Lecture 10: Uveitis

Lecture 11: Corneal degeneration and dystrophy

Lecture 12: Ocular migraines: causes, symptoms, and treatment; Strabismus

Leukocoria: differential diagnosis

OTORHINOLARYNGOLOGY MODULE

Lecture 1: Anatomy of the Neck: Neck Triangles, Fascial Systems, Muscles

Lecture 2: Anatomy of the Neck: Vascular System, Lymph Nodes

Lecture 3: The Patient with Dysphonia, Dysphagia and Dyspnea: The Larynx

Lecture 4: The Patient with Ear Pain 1

Lecture 5: ENT Diseases in Pediatric Patients

Lecture 6: The patient with Ear Pain 2

Lecture 7: The patient with Hearing Loss

Lecture 8: The patient with Salivary glands and Thyroid nodules

Lecture 9: The Patient with Pharyngodynia and Dysphagia

Lecture 10: Relevant Cranial Nerves of the Neck: Vagus Nerve, Glossopharyngeal Nerve, Extrapetrous Facial Nerve

Lecture 11: The Patient with a Neck Mass

Lecture 12: ENT Emergencies

Lecture 13: Oral Cancer

Lecture 14: The Patient with Vertigo

Lecture 15: The Patient with Stuffy Nose: Anatomy and Physiology, Inflammatory Pathology and Midline Lesions

Lecture 16: Anatomy of Pterygopalatine and Infratemporal Fossa: Tumors of the Nose and Paranasal Sinuses

Teaching Methods

Lectures

All lectures will be held synchronously, either in presence or remotely through Microsoft Teams.

Lessons will focus on the most clinically relevant diseases of the Head & Neck, with a special interest on their clinical manifestations; they will also include a recap of the relevant anatomy and physiology. Lectures will start with the presentation of a clinical problem, from which the students will be guided towards the development of the most appropriate diagnostic flow chart and therapeutic plan. Clinical cases will also be discussed in interactive lessons. Students are encouraged to actively participate to the lectures with questions and comments.



Practical activities:

Practical sessions will be held in presence, if possible. Participation is mandatory. Students who cannot be on Campus for reasons related to the pandemic will participate remotely through Microsoft Teams.

Practical activities will focus on the physical examination of the Head & Neck. Tutors will illustrate how to carry out the basic examination of each organ of interest, using the appropriate equipment. Tutors may project video tutorials in order to aid in the explanation of the techniques, or to illustrate advanced/second-level diagnostic procedures. Students will be able to practice among themselves under the tutor's guidance, in order to acquire the basic skills for the physical examination of the Head & Neck.

Verification of learning

Subscription to the exam opens 2 weeks before the date of the exam and closes 1 week before. Students who subscribe to the exam without attending it and without cancelling their subscription must provide a formal justification for their absence, otherwise they will lose the opportunity to attend the following exam session. If a student fails to attend all parts of the exam or withdraws from the exam will be registered as "not sufficient".

The exam could be held in presence (written + oral), remotely (only oral) or in hybrid* modality (only oral). Students will receive communication regarding exam modality before each exam session.

Written Exam:

Multiple Choice Test comprising all Head & Neck Course's Disciplines (Anatomy, Physiology, Oral Diseases, Ophthalmology, Otorhinolaryngology):

- 60 questions, 12 for each module;
- 0.5 points for each correct answer;
- 1 hour maximum;
- to access the oral exam the student must achieve a minimum mark of 18/30, with a minimum of 6 correct answers for each module.

Oral Exam:

Oral Examination covering the whole program. In order to pass the exam, students must obtain a positive evaluation in all modules.

The final mark will be decided collectively by the examination committee.

*students may choose to take the exam in presence or remotely.

Texts

- Slide sets from lessons;
- Suggested textbooks (not mandatory):
 - Peter Lockart Oral Medicine and Medically Complex Patients Wiley and Blackwell, 2013;
 - Kanski Clinical Ophthalmology (Elsevier), Clinical Optics 2014-2015 Section 3 (American Academy of Ophthalmology);
 - Probst, Grevers, Iro. Basic Otorhinolaryngology: A Step by Step Learning Guide (Thieme, 2006);
- Video tutorials.