UNION EUROPEENNE DES MEDECINS SPECIALISTES (UEMS)
EUROPEAN UNION OF MEDICAL SPECIALISTS (UEMS)

SUBSPECIALTY LOGBOOK OTOLOGY/NEUROTOLOGY

(revision 2024)

TRAINING PROGRAMME

INTRODUCTION

The UEMS ORL Section and Board of Otorhinolaryngology has revised the European training programme for the Specialty in 2024. This programme will serve as a guideline for training centres enabling them to meet the European Standard as set out by the European Board of UEMS. We are moving towards competence-based assessments.

WORKING GROUP

Myrthe Hol, Nuno Trigueiros, Irina Arechvo, Jan Löhler, Eugene Panosetti, Jan Boucek

DEFINITION

Otorhinolaryngology (ORL) is the specialty which deals with functions and diseases of the ear, nose, throat, skull base, head and neck. Disorders include trauma, malformations, tumors and other disorders in childhood and in adults of the ear, temporal bone, lateral skull base, nose, paranasal sinuses, anterior skull base, oral cavity, pharynx, larynx, trachea, esophagus, head, neck, thyroid, salivary and lacrimal glands and adjacent structures. It also includes investigation and treatment of conditions affecting the auditory, vestibular, olfactory and gustatory senses and disorders of the cranial nerves as well as human communication in respect of speech, language and voice disorders. Some of the conditions diagnosed by otorhinolaryngologists but located in adjacent areas will be treated with close cooperation with these related specialists.

The subspecialty of Otology/Neuro-Otology is composed of ENT physicians who have acquired specialized knowledge and high surgical skills during their subspecialty training in the history-taking, examination, investigation and treatment planning (surgical and non-surgical

treatment) of congenital or acquired, benign and malignant conditions, malformations and trauma of the temporal bone and surrounding structures as defined in the accompanying subspecialty log book.

THE TRAINING PROGRAMME

The training programme will consist of the following elements:

1. Acquisition of the principles of surgery in general and theoretical detailed knowledge of anatomy, physiology, pathology, aetiology, symptomatology and treatment of diseases of the ear, temporal bone and related structures.

2. Trainees should have access to facilities for temporal bone dissection. They should be able to familiarize themselves with the basic techniques of surgery on the ear, with real and/or virtual surgical microscopic and/or endoscopic techniques.

3. A graded increase in clinical responsibilities and surgical experience will be developed and should be recorded in the log book.

4. A list of diagnostic procedures, non-surgical management and surgical management is outlined in this UEMS ORL Section and Board logbook.

5. The European training programme requires documentation of all skills and operative procedures/management itemized in the section of surgical management. Confirmation of the progression of the trainee to the required competency is necessary.

6. This subspecialty log book will be used in relation to European training exchange.

ASSESSMENT AND EXAMINATION

1. Examination of the theoretical and practical knowledge of the trainee may be included in the European Training Requirements (ETR). Trainees should refer to their national requirements.

2. To achieve the award of the certificate of recognition, the trainee must reach the expected level of knowledge and skills approved by the training programme director before being eligible to practise as an independent otology/neurotology subspecialist.

3. Each trainee must be familiar with all diagnostic and therapeutic (surgical and non-surgical) management associated with the discipline of otology/neurotology.
4. The trainer will be responsible for confirming the competence of the trainee for the procedures and management outlined in the log-book.
5. The contents of this subspecialty logbook will be continuously updated by the UEMS ORL-HNS Board at least every 5 years with respect to new developments.
6. The recommended syllabus for the European Board Exam in ORL-HNS includes this logbook produced by the UEMS ORL Section, and the Intercollegiate Surgical Curriculum Programme Syllabus.

TRAINING CENTRE ROTATION

Trainee: _____

Name Surname Birthdate

Dates of start and finish of training period	Training Centre	Name of Trainer	Signature of Trainer

ATTENDANCE AT ACCREDITED COURSES AND MEETINGS

Date	Course	Comments

UEMS TRAINING LOGBOOK OF OTOLOGY/NEUROTOLOGY COMPLETION OF TRAINING

Trainee: _____
Name Surname Birthdate

Date of commencement of training: _____

Date of completion of training: _____

Lead Trainingcenter	
Name of Trainer in charge	

I, **the trainer in charge**, certify that the register of diagnostic, non-surgical and surgical management shown below is correct.

Date: _____ Signature of trainer: _____

I, **the trainee** certifies that the details given refer to diagnostic, non-surgical and surgical management carried out by me personally or were operations at which I acted as assistant.

Date: _____ Signature of trainee: _____

CONTENT OF THE OTOLOGY/NEUROTOLOGY LOGBOOK

The logbook is divided into the following sections.

A: Diseases/Disorders of the ear, audiovestibular system and surrounding structures - theoretical knowledge
B: Patient assessments
C: Diagnostic Procedures
D: Non-Surgical Management
E: Surgical Management
F: Management of complications and Follow-up

The relevant trainer should endorse by signing and dating, when the trainee has achieved competency in each particular management or procedure.

TEXTBOOKS & LITERATURE

- Mawson´s Diseases of the Ear Stuart Radcliffe Mawson, Harold Ludman
- Otology Neurotology and Lateral Skull base Surgery Oliver Adunka, Craig Buchman
- Atlas of Neurotology and Skull Base Surgery Robert Jackler
- Atlas of Temporal Bone and Lateral Skull Base Surgery Mario Sanna
- Middle ear and mastoid microsurgery, Sanna M.
- Microsurgery of the Skull Base Ugo Fisch, Douglas Mattox
- Diagnostic imaging: Head and Neck, Harnsbergers, Koch, Hamilton, Hudgins
- Dizziness: practical approach to diagnosis and managment, Bronstein AM, Lempert

SCIENTIFIC JOURNALS (Last two years issues, relevant articles)

- Acta Oto-Laryngologica
- Archives of Otolaryngology Head and Neck Surgery
- Clinical Otolaryngology
- The Laryngoscope
- Otology and Neurotology

- European Archives of Otorhinolaryngology and Head and Neck
- Skull Base
- The Journal of International Advanced Otology

GUIDELINES

CONSENSUS PAPERES

REVIEWED MATERIELS OF SCIENTIFIC SOCIETIES PUBLISHED ONLINE (Barany society, Politzer society, EAONO etc.)

OTOLOGY/NEUROTOLOGY		
A: Diseases/Disorders of the ear - theoretical knowledge		
		Signature trainer when competency achieved
Auricle		
Congenital malformations and deformations		
Infections		
Inflammatory		
Benign & malignant tumours		
Traumatic injuries		
Preauricular fistulas		
Ear Canal		
Congenital malformations		
Infections		
Inflammatory		
Benign & malignant tumours		
Exostoses		
Necrotizing otitis externa		
Keratosis obturans/external canal cholesteatoma		
Traumatic injuries		
Acquired stenosis		
Ear Drum and Middle Ear		
Congenital malformations		
Acute & chronic otitis media		
Benign & malignant tumours		
Traumatic injuries		
Barotrauma		
Eustachian tube dysfunction		
Conductive and mixed hearing loss (congenital & acquired)		

Inner Ear and Lateral Skull Base		
Congenital malformations		
Sensorineural hearing loss (congenital & acquired)		
Peripheral and central vestibular disorders		
Non-vestibular balance disorders		
Tinnitus and hyperacusis		
Benign and malignant tumours		
Infections		
Inflammatory		
Traumatic injuries		
Specific conditions		
Tinnitus (including pulsatile tinnitus)		
Hyperacusis and other auditory phenomenon		
Otalgia (including referred otalgia)		
Facial nerve dysfunction		
Occupational related conditions		
General and anamnestic data		
Family history of hearing or balance disorders or malformations		
History of ear infections		
History of otological surgery		
Head trauma		
Noise exposure		
Medication, Ototoxic usage / exposure		
Barotrauma		
Migraine		
Perinatal history		
History of meningitis		
TORCH infection		
History of general diseases and treatments		

B. Patient assessment		
a) Clinical Examination		
		Signature trainer when competency achieved
Otoscopy		
Oto-microscopy		
Oto-endoscopy		
Examination of auricular region		
Eustachian tube function		
b) Hearing Function		
		Signature trainer when competency achieved
Tuning fork tests		
Clinical hearing tests		
c) Vestibular function		
		Signature trainer when competency achieved
Nystagmus		
Evaluation of VOR		
Clinical vestibular tests (Dix Hallpike, etc.)		
Provocative tests (Fistula test, etc.)		
d) Neurological function		
Basic neurological examination (focused on cochleo-vestibular function)		**Signature trainer when competency achieved**
Cranial nerve examination		
Cerebellar examination		
Rombergs Test		
Heel toe test (tandem gait test)		
Unterbergers test		
e) Others		
		Signature trainer when competency achieved
Auscultation of the neck and parauricular area (for bruits)		
Patients related outcome measures		

C. Diagnostics		
a) Hearing Function Tests		
		Signature trainer when competency achieved
Impedance audiometry		
Pure tone audiometry		
Speech audiometry		
Objective hearing tests		
• Oto-acoustic emissions (OAEs)		
• Evoked response audiometry (BSER, CERA, ASSR)		
Supraliminar tests and auditory processing tests		
Paediatric audiology		
• Screening methods		
• Subjective methods		
• Objective methods		
Tinnitus tests		
b) Vestibular Function Tests		
		Signature trainer when competency achieved
Caloric testing		
Video / Electronystagmography		
VEMPs		
Posturography		
Rotating chair test		
vHIT		
c) Facial Nerve Function Tests		
		Signature trainer when competency achieved
Topodiagnostic testing		
• Schirmers test		
• Stapedial reflexes		
Neurophysiological testing		
• Electromyography (EMG)		

• Electroneurography (EnoG)		
d) Imaging		
		Signature trainer when competency achieved
Computerized tomography (to include cone beam CT scanning of the temporal bones)		
Magnetic resonance imaging		
Angiography		
• CT Angiography		
• MR Angiography		
• Cerebral Angiography		
Positron Emission Tomography		
Radionuclide scanning e.g. technetium, gallium scanning		
e) Laboratory Tests		
		Signature trainer when competency achieved
Relevant blood tests		
Cytology		
Histology		
Microbiology		
D. Non-Surgical Management		
		Signature trainer when competency achieved
Pharmacological treatment		
Physical rehabilitation		
Ear infections		
Sensorineural hearing loss (including screening)		
Conductive hearing loss		
Hearing rehabilitation		
Tinnitus		
Vertigo and disequilibrium rehabilitation		
Facial nerve dysfunction rehabilitation		

E. Surgical Management		
Peri-operative management of patients undergoing otological surgery		**Signature trainer when competency achieved**
Temporal bone dissection (laboratory)		
Management of oto-haematoma		
Excision of lesions of the auricle		
Wax removal		
Foreign body removal		
Removal of external auditory canal lesions		
Meatoplasty (Soft tissue & bony)		
Removal of osteomas/exostoses		
Myringotomy		
Ventilation tube insertion		
Myringoplasty / Tympanoplasty		
Tympanotomy		
Mastoidectomy		
• Cortical		
• Modified radical / radical (Back to front approach)		
• Atticotomy / Attico-antrostomy (Front to back approach)		
• Combined approach tympanoplasty		
• Mastoid obliteration		
• Reconstruction of the posterior canal wall and obliteration		
Ossiculoplasty		
Implantation of prostheses		
• Bone anchored hearing implants		
• Middle ear prosthesis (ossicular prosthesis / active middle ear implants)		
• Cochlear implants		
• Prosthesis for pina reconstruction		
Stapes Surgery		
Facial nerve surgery		
• Decompression		
• Re-routing, Grafting. Anastomosis surgery		

Surgical management of vestibular symptoms (Endolymphatic sac decompression, Superior canal dehiscence, perilymphatic fistulas management)		
Vestibular schwannoma surgery		
• Translabyrinthine approach		
• Retrosigmoid approach		
• Middle cranial fossa approach		
Vestibular neurectomy		
Glomus tumour surgery		
Transtemporal approaches to skull base pathologies		
Petrosectomy		
Correction of malformations and deformations		
• Auricle		
• Peri-auricular fistulas		
• External auditory canal		
• Middle ear		
Repair of injuries		
• Auricle		
• External auditory canal		
• Middle and inner ear including nerves, vessels and middle cranial fossa / posterior cranial fossa dura		
• Management of CSF leak		
Surgery of tumours		
• Auricle		
• External auditory canal		
• Middle and inner ear including nerves, vessels and middle cranial fossa / posterior cranial fossa dura and temporal bone resection		
Revision ear surgery		
Surgical management of Eustachian tube		
Inner ear drug delivery		

F. Postoperative complications		
		Signature trainer when competency achieved
Complications of general and local anesthesia		
Bleeding / haematoma		
Infection		
Conductive hearing loss		
Sensorineural hearing loss		
Vertigo / imbalance		
Tinnitus		
Hyperacusis		
Facial nerve dysfunction		
Taste disturbance		
Numbness of the auricle		
CSF leakage		
Intracranial infection		
Lower cranial neuropathy		