

HORIA MOCANU

**CLINICAL EXAMINATION
AND DIAGNOSIS IN
OTORHINOLARYNGOLOGY**

**EDITURA UNIVERSITĂȚII „TITU MAIORESCU” • EDITURA HAMANGIU
BUCUREȘTI, 2020**

HORIA MOCANU

**CLINICAL EXAMINATION AND
DIAGNOSIS IN
OTORHINOLARYNGOLOGY**

EDITURA UNIVERSITĂȚII „TITU MAIORESCU” • EDITURA HAMANGIU
BUCUREȘTI, 2020

Copyright©2020 Editura Universității Titu Maiorescu

Copyright©2020 Editura Hamangiu SRL

Editură de prestigiu recunoscut în domeniul științelor sociale CNATDCU

Toate drepturile asupra acestei ediții sunt rezervate editurii și autorilor.

Nicio parte din această lucrare nu poate fi reprodusă, stocată sau transmisă indiferent prin ce formă, fără acordul prealabil scris al autorilor.

Editura Universității Titu Maiorescu București: tel.: 021.330.10.50; fax: 021.311.22.97

Editura Hamangiu: tel./fax: 021.336.01.25; 031.425.42.24; 031.805.80.21

Descrierea CIP a Bibliotecii Naționale a României

MOCANU, HORIA

Clinical examination and diagnosis in otorhinolaryngology / Horia Mocanu. - București : Editura Universității Titu Maiorescu : Editura Hamangiu, 2020

ISBN 978-606-767-074-5

ISBN 978-606-27-1616-5

616.21

Graphics: Anca CIOBANU, Arch.
Denisa DORNEANU, 4th year Medical Student

Photo: Horia MOCANU, MD, PhD, Dr.med., Lecturer

Collaborators: Cristina GHIȚĂ, 5th year Medical Student
Paolo DI FRANCESCO, 4th year Medical Student
Denisa DORNEANU, 4th year Medical Student
Laurențiu Flavius LEUȘTEAN, 4th year Medical Student

TABLE OF CONTENTS

Latin Abbreviation Index.....	1
Greek Abbreviation Index.....	4
Index of Figures.....	5
Index of Tables	8
I. SPECIFIC ENT INSTRUMENTS.....	9
I.1. LIGHT SOURCES.....	9
I.2. INSTRUMENTS.....	14
I.3. FREQUENT MISTAKES.....	19
I.4. GRADING CHART FOR THE PRACTICAL ENT EXAM	22
II. CLINICAL EXAMINATION.....	25
II.1. ANTERIOR RHINOSCOPY	25
II.2. BUCOPHARYNGOSCOPY	28
II.3. OTOSCOPY	32
II.4. POSTERIOR RHINOSCOPY	37
II.5. INDIRECT LARYNGOSCOPY	40
II.6. PALPATION OF TRIGEMINAL POINTS	43
II.7. PALPATION OF SINUS POINTS	45
II.8. PALPATION OF THE CERVICAL REGION	48
II.9. EXAMINATION OF THE FACIAL NERVE	57
II.10. WEBER TEST.....	59
II.11. RINNÉ TEST	65
II.12. SPONTANEOUS NYSTAGMUS TEST.....	67
II.13. EXTENDED ARMS TEST	76
II.14. „BARANY” INDICATION TEST.....	78
II.15. ROMBERG TEST	79
II.16. UNTERBERGER TEST.....	81
II.17. WEIL-BABINSKI TEST	82
III. ADDITIONAL EXAMINATIONS AND PARACLINICAL INVESTIGATIONS 83	
III.1. NASAL ENDOSCOPY.....	83

III.2. DIRECT LARYNGOSCOPY	85
III.3. STROBOSCOPY	86
III.4. TRACHEOBRONCHOSCOPY	87
III.5. OESOPHAGOSCOPY	88
III.6. FREE FIELD VOICE TEST	89
III.7. HEARING FIELD.....	90
III.8. PURE TONE AUDIOMETRY (PTA)	91
III.9. SPEECH DISCRIMINATION AUDIOMETRY	94
III.10. OTHER TYPES OF AUDIOMETRY	96
III.10.1. Behavioral Observation Audiometry	96
III.10.2. Visual Reinforcement Audiometry (VRA).....	96
III.10.3. Conditioned Play Audiometry	96
III.10.4. Verbal Auditory Screening for Children (VASC).....	96
III.10.5. Recruitment Audiometry	96
III.10.6. Short Increment Sensitivity Index (SISI)	97
III.10.7. Tone Decay Test (TDT)	97
III.11. ELECTROPHYSIOLOGIC AUDIOLOGIC ASSESSMENT	99
III.11.1. Otoacoustic Emissions (OAEs)	99
III.11.2. Auditory Brainstem Responses (ABRs, BAER, BSER).....	99
III.11.3. Auditory Steady State Responses (ASSRs).....	100
III.11.4. Electrocochleography (ECoG)	100
III.11.5. Electroneuronography (ENoG).....	100
III.12. TYMPANOGRAM	105
III.13. STAPEDIUS REFLEX (SR).....	108
III.14. EUSTACHIAN TUBE DYSFUNCTION TESTS	109
III.14.1. Valsalva Maneuver	109
III.14.2. Toynbee Maneuver:.....	109
III.14.3. Politzer Maneuver (Poltzerization):	109
III.15. PROVOKED NYSTAGMUS	110
III.15.1. Head Impulse Test	110
III.15.2. Dix-Hallpike Maneuver	110
III.15.3. Nystagmus Vibration Test	110

III.15.4. Nystagmus Rotation Test.....	110
III.15.5. Nystagmus Caloric Test.....	111
III.15.6. Nystagmus Pneumatic Test	111
III.15.7. Electronystagmography /Videonystagmography	111
III.15.8. Posturography	112
III.15.9. VEMP – Vestibular Evoked Myogenic Potentials	112
III.16. PARANASAL SINUS X-RAY.....	114
III.17. C.T./M.R.I. OF PARANASAL SINUSES.....	117
III.18. TEMPORAL BONE X-RAY.....	119
III.19. TEMPORAL BONE MRI.....	121
III.20. TEMPORAL BONE CT	122
III.21. CERVICAL ULTRASOUND.....	123
III.22. NUCLEAR MEDICINE IMAGING.....	125
III.22.1. Positron Emission Tomography with Computed Tomography (PET-CT).	125
III. 22.2. Thyroid Scintigraphy.....	125
III.22.3. Parathyroid Scintigraphy	126
III.23. VOICE, SMELL AND TASTE TESTING.....	127
III.23.1. Olfactometry.....	127
III.23.2. Gustometry	127
III.23.3. Laryngeal Electromyography (LEMG)	127
IV. E.N.T. EMERGENCIES	129
IV.1. CONIOTOMY	129
IV.2. TRACHEOTOMY	129
IV.3. TRACHEAL CANNULA CARE	131
IV.4. FOREIGN BODIES	138
IV.5. POST-TONSILECTOMY HEMORRHAGE	138
IV.6. EPISTAXIS.....	140
IV.7. VESTIBULAR SYNDROME	144
IV.8. SUDDEN HEARING LOSS.....	145
BIBLIOGRAPHY	146