

Otology and Neurotology

Table of Contents

Dedication	ix
Foreword	x
Acknowledgment	xi
A Note from Series Editors	xii
Section I: Basic Sciences	
1. Embryology of the Ear and Temporal Bone <i>Kamal Parsram, Chris E. de Souza, and Rosemarie A. de Souza</i>	3
2. Surgical Anatomy of the Temporal Bone and Ear <i>Shailendra Sivalingam, Seung-Ho Shin, Alessandra Russo, Giuseppe Di Trapani, Ibrahim Shami, and Mario Sanna</i>	8
3. Anatomy of the Auditory System <i>Peter A. Gochee and Hinrich Staecker</i>	41
4. Physiology of Hearing <i>Anuradha R. Bantwal and James W. Hall III</i>	46
5. Comprehensive Diagnostic Audiology <i>Brittany N. Hensley, Anuradha R. Bantwal, and James W. Hall III</i>	56
6. Anatomy of the Vestibular System <i>Arnaud F. Bewley and Michael J. Ruckenstein</i>	72
7. Physiology of the Vestibular System <i>Betty S. Tsai and Lawrence R. Lustig</i>	80
8. Tests to Evaluate the Vestibular System <i>Betty S. Tsai and Lawrence R. Lustig</i>	86
9. Imaging of the Temporal Bone <i>Osamu Sakai, Rohini N. Nadgir, Akifumi Fujita, and Ahmed H. El Beltagi</i>	98
10. Molecular Genetics of Hearing Losses <i>Jessica R. Levi, Kenneth M. Grundfast, and Anil K. Lalwani</i>	113
Section II: Approach to Patients with Otological/Neurotological Disease	
Part A: Disorders of the External Ear	
11. Otoplasty <i>Harry S. Hwang and Jeffrey H. Spiegel</i>	127
12. Evaluation and Treatment of Malformations of the Ear <i>Paul R. Lambert</i>	132

13. Diseases of the External Ear <i>Neil M. Sperling, Krishna Sury, and Scott S. Harris</i>	141
Part B: Disorders of the Middle Ear	
14. Otitis Media <i>Marcos V. Goycoolea</i>	151
15. Complications of Otitis Media <i>Vijay K. Sharma and Anand K. Devaiah</i>	162
16. Cholesteatoma: Causes, Treatment, and Complications <i>Sarah E. Mowry and Marlan R. Hansen</i>	171
17. Ossicular Reconstruction <i>Michael Hoa and John W. House</i>	181
18. Retraction Pockets and Atelectasis <i>Ana H. Kim, Tova C. Fischer, and Simon C. Parisier</i>	188
19. Disorders of the Eustachian Tube <i>Lee J. Guo and Dennis S. Poe</i>	193
20. Otosclerosis <i>Chris E. de Souza and Milind V. Kirtane</i>	204
21. Other Disorders of the Otic Capsule <i>Milind V. Kirtane and Chris E. de Souza</i>	227
22. Implantable Middle Ear Hearing Devices: Esteem and Maxum <i>Michael E. Glasscock III and Jack A. Shohet</i>	233
Part C: Disorders of the Inner Ear	
23. Meniere Disease <i>Allison Dobbie and Hilary Brodie</i>	243
24. Diagnosis, Evaluation, and Management of Causes of Peripheral Incapacitating Vertigo other than Meniere Disease <i>Jason A. Beyea and Lorne S. Parnes</i>	252
25. Noise-Induced Hearing Loss: Detection, Prevention, and Management <i>Colleen G. Le Prell and Christopher Spankovich</i>	268
26. (Central) Auditory Processing Disorders <i>Anuradha R. Bantwal and James W. Hall III</i>	285
27. Tinnitus: There Is Something You Can Do About It! <i>Claudia Barros Coelho, Richard S. Tyler, Marlan R. Hansen, and Bruce J. Gantz</i>	301
28. Sudden Sensorineural Hearing Loss <i>Quyen T. Nguyen, Beom Gyu Kim, and Jeffrey P. Harris</i>	308
29. Temporal Bone Trauma <i>Brandon Isaacson, J. Walter Kutz, Jr., and Peter S. Roland</i>	318

Part D: Disorders of Facial Nerve		
30.	Diagnosis, Evaluation, and Treatment of Facial Nerve Disorders <i>Ryan G. Porter and Jack M. Kartush</i>	329
Section III: Neurotologic and Lateral Skull Base Surgery		
31.	Acoustic Neuromas and Neurofibromatosis Type 2 <i>Shailendra Sivalingam, Seung-Ho Shin, Abdelkader Taibah, Alessandra Russo, and Mario Sanna</i>	351
32.	Nonacoustic Cerebellopontine Angle Tumors <i>Shailendra Sivalingam, Seung-Ho Shin, Giuseppe De Donato, Alessandra Russo, and Mario Sanna</i>	370
33.	Cancer of the Temporal Bone <i>David A. Moffat and Jonathan H. K. Kong</i>	381
34.	Tympanojugular Paragangliomas <i>Shailendra Sivalingam, Seung-Ho Shin, Filippo Di Lella, Lorenzo Lauda, and Mario Sanna</i>	391
35.	Jugular Foramen Tumors <i>Shailendra Sivalingam, Seung-Ho Shin, Giuseppe Di Trapani, Abdelkader Taibah, and Mario Sanna</i>	409
36.	Skull Base Osteomyelitis <i>Chris E. de Souza and Rosemarie A. de Souza</i>	418
Section IV: Electronic Listening Assistive Devices		
37.	Hearing Aids <i>Linda Thibodeau</i>	423
38.	Hearing Rehabilitation with Osseointegrated Implants <i>Senja Tomovic and Jed A. Kwartler</i>	434
39.	Cochlear Implants <i>Andrea L. Marlowe, Wade W. Chien, and John K. Niparko</i>	441
40.	Brainstem Auditory Implants <i>Steven R. Otto, Derald E. Brackmann, Robert V. Shannon, and Jose N. Fayad</i>	448
41.	Robotics, Image Guidance, and Computer-Assisted Surgery in Otolaryngology/Neurotology <i>Ravi N. Samy, Vasile Nistor, and Nael M. Shoman</i>	459
42.	Experimental Approaches to Auditory Neuroscience <i>Bradley W. Kesser, Joseph Burns, Benjamin R. Thiede, and Gwenaëlle S. G. Géléoc</i>	465
	Index	477