

Contents

- VII Preface
- VIII Note Concerning Images Used in This Book

1 Chapter ① Normal CT Images of the Temporal Bone

- 2 ① Infant
- 18 ② Older Child

35 Chapter ② Postnatal Growth of the Temporal Bone

- 36 ① External Auditory Canal
- 38 ② Mastoid Air Cells
- 42 ③ Internal Auditory Canal
- 44 ④ Vestibular Aqueduct

47 Chapter ③ Congenital Anomalies

- 48 ① External Auditory Canal
 - 48 EAC Atresia and Stenosis
 - 49 Case 1 : Congenital EAC Atresia
 - 52 Case 2 : Congenital EAC Stenosis with Cholesteatoma
 - 56 ② Auditory Ossicles and Middle Ear
 - 56 Congenital Ossicular Malformation
 - 56 Stapes Surgery in Children
 - 57 CT Diagnosis of Ossicular Malformation
 - 57 Case 1 : Ossicular Disruption with Stapes Fixation
 - 59 Case 2 : Ossicular Deformities with Stapes Fixation
 - 62 Case 3 : Ossicular Deformities
 - 65 Case 4 : Oval Window Atresia
 - 66 Case 5 : Skull Base Vascular Anomalies (CHARGE Syndrome)
 - 70 Case 6 : Facial Nerve Anomaly
- 73 ③ Inner Ear
 - 73 Congenital Malformation of the Inner Ear
 - 73 Genesis of the Inner Ear
 - 73 Histopathological Classification of Inner Ear Malformation
 - 73 Classification Based on Clinical Imaging
 - 75 Role of CT and MRI in Diagnosis of Inner Ear Anomalies
 - 76 Case 1 : Michel Aplasia (Inner Ear Aplasia)
 - 81 Case 2 : Cochlear Aplasia
 - 84 Case 3 : Common Cavity Deformity (1)
 - 88 Case 4 : Common Cavity Deformity (2)

- 91 Case 5 : Aplasia of Cochlear Upper Turns and Semicircular Canals with Cochlear Nerve Canal Stenosis
- 94 Case 6 : Incomplete Partition Type I (IP-I): Case of Cochlear Implantation Revision
- 97 Case 7 : Incomplete Partition Type II (IP-II): Mondini Dysplasia (Enlarged Vestibular Aqueduct)
- 102 Case 8 : Incomplete Partition Type III (IP-III)
- 106 Special Article: Incomplete Partition Type III. Levent Sennaroglu, M.D.

109 ④ Internal Auditory Canal

109 IAC Stenosis

- 110 Case 1 : IAC Stenosis
- 114 Case 2 : Stenosis of Cochlear Nerve Canal
- 117 Case 3 : IAC Malformation, Arachnoid Cyst of Fallopian Canal

123 Chapter ④ Inflammatory Diseases of the Middle Ear

124 ① Otitis Media and Cholesteatoma

124 Eustachian Tube Function and Mastoid Air Cell Development

- 125 Case 1 : Congenital Cholesteatoma
- 127 Case 2 : Recurrent Otitis Media, Otitis Media with Effusion
- 129 Case 3 : Adhesive Otitis Media
- 131 Case 4 : Acute Otitis Media, Sigmoid Sinus Thrombosis
- 134 Case 5 : Cholesteatoma: Pars Flaccida Cholesteatoma (1)
- 137 Case 6 : Cholesteatoma: Pars Flaccida Cholesteatoma (2)
- 139 Case 7 : Cholesterol Granuloma

141 ② Image Findings after Tympanoplasty

141 Classification of Tympanoplasty

141 Ossiculoplasty

142 Evaluation of Postoperative Results

- 143 Case 1 : Cholesteatoma, 1 : Good Aeration after Primary Operation
- 144 Case 2 : Cholesteatoma, 2 : No Aeration after Primary Operation
- 146 Case 3 : Cholesteatoma, 3 : Type III Incus Interposition Ossiculoplasty
- 147 Case 4 : Cholesteatoma, 4 : Type III Ossiculoplasty with Long Columella
- 149 Case 5 : Cholesteatoma, 5 : Recurrence

151 Chapter ⑤ Other Ear Disorders

- 152 Case 1 : Pericochlear Hypoattenuating Foci and Stapes Fixation
- 155 Case 2 : Traumatic Ossicular Disruption
- 158 Case 3 : Cochlear Implant Magnet Trouble after Head Trauma
- 159 Case 4 : Cochlear Implantation in an Ear with Extensive Cholesteatoma
- 162 Case 5 : Meningitic Labyrinthitis

165 Index

169 Author & Acknowledgments