Audiology & Neurotology
The Science of Hearing and Balance

Aging and Implantable Hearing Solutions
Extended Abstracts from the Cochlear™ Science and Research Seminar

Guest Editor
Olivier Sterkers, Paris
Implantable Bone Conduction Hearing Aids

Editors
Martin Kompis
Marco-Domenico Caversaccio

Three decades after the introduction of the first bone-anchored hearing aids, the available systems have improved significantly and the field is expanding faster than ever. New technologies such as digital signal processing have opened new avenues unique to bone conduction hearing aids. Better insights into the physiology of bone-conducted hearing have not only changed the field but also provided ideas for new areas of application.

In this volume of Advances in Oto-Rhino-Laryngology, renowned researchers and experienced clinicians from all over the world present the latest findings and practices. Reviews on the theoretical background of bone conduction hearing, presentation of currently available hearing aid systems, chapters on monaural and binaural hearing with implantable bone conduction hearing aids, a comparison with conventional hearing aids and a glimpse into the future of implantable bone conduction hearing aids render this volume an invaluable reference book to ENT surgeons, audiologists, hearing aid acousticians and researchers alike.

Contents

Preface: Kompis, M.; Caversaccio, M.-D.
Introduction and Basics
Historical Background of Bone Conduction Hearing Devices and Bone Conduction Hearing Aids: Mudry, A.; Tjellström, A.
Acoustic and Physiologic Aspects of Bone Conduction Hearing: Stenfelt, S.
Overview over Different Systems
The Ponto Bone-Anchored Hearing System: Westerkull, P.
Partially Implantable Bone Conduction Hearing Aids without a Percutaneous Abutment (Otolog): Technique and Preliminary Clinical Results: Siegert, R.
Surgical Aspects
Surgery for the Bone-Anchored Hearing Aid: Arnold, A.; Caversaccio, M.-D.; Mudry, A.
Paediatric Baha: McDermott, A.-L.; Sheehan, P.
Complications of Bone-Anchored Hearing Devices: Wazen, J.J.; Wycherly, B.; Daugherty, J.
Audiological Aspects
Audiological Results with Baha® in Conductive and Mixed Hearing Loss: Pfiffner, F.; Caversaccio, M.-D.; Kompis, M.
Bone-Anchored Devices in Single-Sided Deafness: Stewart, C.M.; Clark, J.H.; Niparko, J.K.
Challenges and Recent Developments in Sound Processing for Baha®: Flynn, M.C.
Bone-Anchored Hearing Aids versus Conventional Hearing Aids: Banga, R.; Lawrence, R.; Reid, A.; McDermott, A.-L.
Outlook
The Future of Bone Conduction Hearing Devices: Håkansson, B.

Author Index / Subject Index

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Contents

1 Editorial
Sterkers, O. (Paris)

3 Physiopathology of Age-Related Hearing Loss: Diagnostic and Therapeutic Perspectives
Wang, J.; Puel, J.-L. (Montpellier)

4 Implications of Hearing Loss for Older Adults
Lin, F. (Baltimore, Md.)

6 Hearing in the Elderly: Cochlear Implants in Comparison to Hearing Aids
Steffens, T. (Regensburg); Kießling, J. (Giessen); Müller-Deile, J. (Kiel)

7 Diagnosis of Auditory Neuropathy in Elderly
Rosenhall, U.; Hederstierna, C.; Dahlquist, M.; Idrizbegovic, E. (Stockholm)

8 Effects of Aging on Multimodal Perception of Speech
Deggouj, N.; Wathour, J.; Castelein, S.; Gerard, J.-M. (Brussels)

10 Speech Perception, Cognitive Function and the Role of Hearing Aids and Cochlear Implants
Meister, H. (Cologne)

12 A Novel Approach for Adult Hearing Screening
Grandori, F.; Tognola, G., Paglialonga, A. (Milan)

14 Cochlear Implantation in the Elderly: Surgical and Hearing Outcomes
Luntz, M.; Yehudai, N. (Haifa); Most, T. (Tel Aviv); Shpak, T. (Haifa)

15 Cochlear Implantation in the Aging Population
Skarzynski, P.H. (Warsaw/Kajetany); Olszewski, L.; Skarzynski, H.; Lorens, A. (Warsaw)

17 Outcomes of CI Users Implanted over 60 Years Old
Lachowska, M.; Wiśniewska, D.; Niemczyk, K. (Warsaw)

18 Cochlear Implantation in Patients Over 65: Clinical Experience
Karlik, M.; Czerniejewska, H.; Gibasiewicz, R. (Poznań)

20 Intracranial Complications of Cochlear Implantation in the Elderly
Athanasiadis-Sismanis, A. (Athens)

20 Cochlear Implant Outcomes in the Elderly
Mosnier, I. (Paris)
22 Tinnitus Comparison of Electric and Acoustic Stimulation in Elderly Patients with a Cochlear Implant
Keiner, A.; Frontera, P. (Piacenza); Tyler, R. (Iowa City, Iowa); Cuda, D. (Piacenza)

24 Elderly Patients Benefit from Cochlear Implantation Regarding Auditory Rehabilitation, Quality of Life, Tinnitus and Psychological Comorbidities

26 Author Index
Audiology & Neurotology

The Science of Hearing and Balance


Editor-in-Chief

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Contents

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In recent years, methods for coupling active implants to the middle ear, round window or combinations of passive middle ear prostheses have progressed considerably. Patient selection criteria have expanded from purely sensorineural hearing losses to conductive and mixed hearing losses in difficult-to-treat ears. This book takes into consideration recently developed methods as well as devices in current use. It begins with a fascinating and authentic history of active middle ear implants, written by one of the main pioneers in the field. In the following chapters, leading scientists and clinicians discuss the relevant topics in otology and audiology. Treatments for sensorineural hearing loss, conductive and mixed hearing losses, and results on alternative coupling sites such as the stapes footplate and the oval window are also covered, as well as articles on candidacy and cost-effectiveness. This publication is a must for ENT professionals and surgeons seeking out the latest knowledge on current research and clinical applications of active middle ear implants for all types of hearing loss.

Contents

Preface: Böheim, K.
The Vibrant Soundbridge: Design and Development: Ball, G.R.
Cost-Effectiveness of Implantable Middle Ear Hearing Devices: Snik, A.; Verhaegen, V.; Mulder, J.; Cremers, C.
Indications and Candidacy for Active Middle Ear Implants: Wagner, F.; Todt, I.; Wagner, J.; Ernst, A.
Clinical Results with an Active Middle Ear Implant in the Oval Window: Hütttenbrink, K.B.; Beutner, D.; Zahnert, T.
Experiments on the Coupling of an Active Middle Ear Implant to the Stapes Footplate: Zahnert, T.; Bornitz, M.; Hütttenbrink, K.B.
Clinical Experience with the Active Middle Ear Implant Vibrant Soundbridge in Sensorineural Hearing Loss: Pok, S.M.; Schögel, M.; Böheim, K.
The Esteem System: A Totally Implantable Hearing Device: Maurer, J.; Savvas, E.
Totally Implantable Active Middle Ear Implants: Ten Years' Experience at the University of Tübingen: Zenner, H.P.; Rodriguez Jorge, J.

Author Index
Subject Index
Cochlear Implants and Hearing Preservation

Editors
Paul Van de Heyning
Andrea Kleine Punte

Contents
Preface: Van de Heyning, P.; Kleine Punte, A.
Introduction
Electric Acoustic Stimulation: A New Era in Prosthetic Hearing Rehabilitation: Van de Heyning, P.; Kleine Punte, A.
Molecular Biology and Hearing Preservation
Hearing Preservation in Cochlear Implantation and Drug Treatment: Barriot, S. et al.
Basic Sciences – Histology
Ganglion Cell and 'Dendrite' Populations in Electric Acoustic Stimulation Ears: Rask-Andersen, H.; Liu, W.; Linthicum, F.
Technological Development
Electrode Features for Hearing Preservation and Drug Delivery Strategies: Jolly, C. et al.
Audiology
Detection of Dead Regions in the Cochlea: Reliance for Combined Electric and Acoustic Stimulation: Moore, B.C.J. et al.
Neuronal Responses in Cat Inferior Colliculus to Combined Acoustic and Electric Stimulation: Vollmer, M. et al.

From Electric Acoustic Stimulation to Improved Sound Coding in Cochlear Implants: Nopp, P.; Polak, M.

Surgery
Minimizing Intracochlear Trauma during Cochlear Implantation: Adunka, O.F. et al.
Electric Acoustic Stimulation in Children: Skarzynski, H.; Lorens, A.

Author Index
Subject Index
ORL contains concise, original scientific papers of interest for both clinicians and researchers in oto-rhino-laryngology and head and neck surgery. Contributions drawn from the basic sciences cover new knowledge on the anatomy, pathology, pathophysiology, immunology and tumor biology of head and neck and the auditory and vestibular system, the salivary glands, paranasal sinuses and of the organs of the upper respiratory and digestive tract. The practical value of the journal is accentuated by reports of clinical progress in diagnosis and therapy.

Selected contributions

Sudden Sensorineural Hearing Loss as Prodromal Symptom of Anterior Inferior Cerebellar Artery Infarction: Martines, F.; Dispensa, F.; Gagliardo, C.; Martines, E.; Bentivegna, D. (Palermo)


Sudden Sensorineural Hearing Loss: Subclinical Viral and Toxoplasmosis Infections as Aetiology and How They Alter the Clinical Course: Kikidis, D.; Nikolopoulos, T.P.; Kampessis, G.; Stamatiou, G.; Chrysovergis, A. (Athens)


Expression Profile of p63 in 127 Patients with Laryngeal Squamous Cell Carcinoma: Borba, M. (Salvador da Bahia); Cernea, C. (São Paulo); Dias, F.; Faria, P. (Rio de Janeiro); Bachi, C.; Brandão, L. (São Paulo); Costa, A. (Rio de Janeiro)

Indication of the Side of Delayed Endolymphatic Hydrops by Vestibular Evoked Myogenic Potential and Caloric Test: Egami, N.; Uchio, M.; Yamasoba, T. (Tokyo); Murofushi, T. (Kawasaki); Iwasaki, S. (Tokyo)

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