34 Advances in Oto-Rhino-Laryngology
Editor: C.R. Pfaltz

Neuro-Otology and
Skull Base Surgery

Editors: P. van den Broek, C Cremers, G. Hoogland, J. Manni

Karger

Neuro-Otology and Skull Base Surgery

Advances in
Oto-Rhino-Laryngology

Vol. 34

Series Editor
C.R. Pfaltz, Basel

S. Karger • Basel • München • Paris • London • New York • Tokyo • Sydney

International Workshop on Neuro-Otology and Skull Base Surgery, Nijmegen, November 9-12, 1983

Neuro-Otology and
Skull Base Surgery

Volume Editors
P. van den Broek, Nijmegen
C. Cremers, Nijmegen
G. Hoogland, Nijmegen
J. Manni, Nijmegen

80 figures and 60 tables, 1984

Karger
S. Karger • Basel • München • Paris • London • New York • Tokyo • Sydney

Advances in Oto-Rhino-Laryngology

National Library of Medicine, Cataloging in Publication
Drug Dosage

The authors and the publisher have exerted every effort to ensure that drug selection and dosage set forth in this text are in accord with current recommendations and practice at the time of publication. However, in view of ongoing research, changes in government regulations, and the constant flow of information relating to drug therapy and drug reactions, the reader is urged to check the package insert for each drug for any change in indications and dosage and for added warnings and precautions. This is particularly important when the recommended agent is a new and/or infrequently employed drug.

All rights reserved.

No part of this publication may be translated into other languages, reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, recording, microcopying, or by any information storage and retrieval system, without permission in writing from the publisher.

© Copyright 1984 by S. Karger AG, P.O. Box, CH-4009 Basel (Switzerland)
Printed in Switzerland by Thür AG Offsetdruck, Pratteln
ISBN 3-8055-3887-1

Contents

List of Contributors VII
Introduction 1

Hoogland, G.A. (Nijmegen): Some Historical Remarks on Acoustic Neuroma 3
Lang, J. (Würzburg): Clinical Anatomy of the Cerebellopontine Angle and Internal Acoustic Meatus 8
Nieuwenhuys, R. (Nijmegen): Anatomy of the Auditory Pathways, with Emphasis on the Brain Stem 25
Eggermont, J.J. (Nijmegen): Use of Electrocochleography and Brain Stem Auditory Evoked Potentials in the Diagnosis of Cerebellopontine Angle Pathology 47
of Cerebellopontine Angle Tumours 57
Thijssen, H.O.M.; Merx, J.L. (Nijmegen): Radiological Diagnosis of Pathology in the Cerebellopontine Angle 71
Verhagen, W.I.M.; Schulte, B.P.M. (Nijmegen): Neurological Diagnosis of Pathology in the Cerebellopontine Angle 80
Cremers, C. W.R.J. (Nijmegen): Evaluation of Diagnostic Routine in Cerebellopontine Angle Pathology 104
Panel Discussion: Pitfalls in CPA Pathology 110

Contents VI

Panel Discussion: Treatment of CPA Pathology 193
Manni, J.J. (Nijmegen); Stennert, E. (Göttingen): Diagnostic Methods in Facial Nerve Pathology 202
Stennert, E. (Göttingen): Indications for Facial Nerve Surgery 214
Fisch, U. (Zürich): Infratemporal Fossa Approach for Lesions in the Temporal Bone and Base of the Skull 254
Subject Index 267
List of Contributors

Allum, J.: Department of Oto-Rhino-Laryngology, University of Basel, Hebelstrasse 10, CH-4031 Basel (Switzerland)
Broek, P. van den: Department of Otorhinolaryngology, University of Nijmegen, PO Box 9101, NL-6500 HB Nijmegen (The Netherlands)
Corlieu, P.: Service ORL, Hôpital Cochin, 27, rue du Fbg Saint-Jacques, F-75014 Paris (France)
Cremers, C.W.R.J.: Department of Otorhinolaryngology, University of Nijmegen, PO Box 9101, NL-6500 HB Nijmegen (The Netherlands)
Dawes, J.D.K.: The Royal Victoria Infirmary, ENT Department, Queen Victoria Road, Newcastle-upon-Tyne NE1 4LP (England)
Desgeorges, M.: Service de Neurochirurgie, Hôpital d'Instruction des Armées du Val de Grâce, F-75000 Paris (France)
Eggermont, J.J.: Laboratory of Medical Physics and Biophysics, University of Nijmegen, Geert Grooteplein Noord 21, NL-6525 EZ Nijmegen (The Netherlands)
Fisch, U.: University Hospital Zürich, Clinic for ORL, Rämistrasse 100, CH-8091 Zürich (Switzerland)
Handrock, M.: ENT Clinic, Universitätspoliklinik Steglitz, Free University of Berlin, Hindenburgdamm 30, D-1000 Berlin 45
Hombergen, G.C.J.H.: Department of Otorhinolaryngology, University of Nijmegen, PO Box 9101, NL-6500 HB Nijmegen (The Netherlands)
Hoogland, G.A.: Department of Otorhinolaryngology, University of Nijmegen, PO Box 9101, NL-6500 HB Nijmegen (The Netherlands)
Huygen, P.L.M.: Department of Otorhinolaryngology, University of Nijmegen, PO Box 9101, NL-6500 HB Nijmegen (The Netherlands)
Huijzen, C. van: Department of Anatomy and Embryology, Geert Grooteplein Noord 21, NL-6525 EZ Nijmegen (The Netherlands)
King, T.T.: Department of Neurosurgery, The London Hospital, Whitechapel, London E1 1BB (England)
Lang, J.: Anatomical Institute of the University of Wüzburg, Koellikerstrasse 6, D-8700 Würzburg (FRG)
Manni, J.J.: Department of Otorhinolaryngology, University of Nijmegen, PO Box 9101, NL-6500 HB Nijmegen (The Netherlands)

List of Contributors VIII

Marquet, J.J.: Department of Oto-Rhino-Laryngology, Fruthoflaan 91/12, B-2600 Antwerp (Belgium)
Marres, E.H.M.A.: Department of Otorhinolaryngology, Hospital St. Annadal, University of Maastricht, NL-6201 BX Maastricht (The Netherlands)