Book Reviews

OTITIS MEDIA IN INFANTS AND CHILDREN

Bluestone and Klein (eds.), W.B. Saunders. 1995. ISBN 0721648185. Price £45.00.

This book has been written by authors whose department has produced vast quantities of research and observations on otitis media. As a result the impressions and judgements formed are based on years of experience.

The first chapter on definitions, terminology and classification sets the scene and provides a good basic outline for what lies ahead. The chapter on anatomy is detailed and comprehensive. The third chapter covers physiology, pathophysiology and pathogenesis. This is an excellent chapter with a wealth of both clinical and experimental data. This is followed by sections on microbiology and immunology which again are well covered and supported by literature references. The chapter on diagnosis is of value to both family practitioners and specialists. Emphasis is placed on pneumatic otoscopy, something very much under-used by primary care doctors and a practice of great value. There is possibly a little too much emphasis on tympanometry. Inadequate emphasis on the physical examination of the ear and the effect of wax in the external meatus may lead primary care physicians to feel secure that tympanometry will provide all the answers. The need for a good auroscope and competent examination technique of the ear is more important and could have been stressed more. Tympanocentesis for acute otitis is subject to different criteria in the United States and is not commonly performed in the UK. The assessment of eustachian tube function and dysfunction is also not quite as clear-cut as implied.

The chapter on the management of otitis is the longest, with an extensive literature review. There is possibly too much pharmacology and controversy still exists over the role of antimicrobials for secretory otitis and chemoprophylaxis for recurrent acute otitis.

The final chapter deals with complications and sequelae. Fortunately the intratemporal complications are seen less frequently in developed countries but are unfortunately still too common in the developing world. Trainees in developed countries still need to be aware of the potential risks of middle ear disease. There is increasing evidence that children with recurrent acute otitis or persistent secretory otitis perform less well in tests of language and speech than their disease-free peers. In addition data suggests that delayed or impaired development may be an important sequelae of otitis media. A good overview of complications, including hearing loss, perforations, adhesive otitis,

cholesteatoma and tympanosclerosis, is also provided. Finally the recommendation that tympanoplasty be offered at a younger age (six years and over) is welcome and is probably the practice of most serious otologic surgeons.

Overall this is an excellent book. It is a must for the departmental library and would be a very useful book for the primary care physicians to have on the shelf.

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COCHLEAR IMPLANTS IN CHILDREN

A.S. Uziel, M. Mondain, eds., Karger. 1995. ISBN 3805560958. Price SFr 199/DM 238.

Cochlear implantation is now a firmly established method of treating profoundly deaf children. This edition of Advances in Oto-Rhino-Laryngology addresses cochlear implantation in children and should be of interest both to the general reader as well as to those involved in the management of such children. All aspects of implantation are considered, commencing with an overview of the ethical issues, and how these have evolved or resolved with time. This chapter would certainly set the historical context of implantation for those not aware of the dilemmas raised by the deaf community.

The format of the book is logical and takes the reader through the selection process, the surgery in all its aspects and then deals with rehabilitation, ending with the potential future requirements for the procedure. The selection process has been divided into the general criteria employed for selection and a useful chapter on the reasons for rejection. Radiological assessment, in particular, has been well covered especially the topic of which method of imaging to choose and why. The arguments for computerized tomograph, the balance between the detailed evaluation obtained on bone windows against the fact that a diagnosis may be missed in 14 per cent of scans is discussed. The chapter on imaging methods of the future, especially the potential of positron emission tomography (PET) with its ability to relate to functioning auditory cortex was well written. Inevitably this subject probably raises more questions than the chapter answered, but it was also one of the most interesting discussions.

The chapters on surgical technique encompassed a wide range of issues in a concise fashion. Generalized pitfalls, together with specific problems such as Mondini deformity and problems with ossified cochlea following meningitis were all covered well. Specific surgical detail

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has also been addressed in more depth for surgeons practising in this field but the editors manage to maintain a well balanced overview of the subject.

Rehabilitation has been covered quite extensively. Detailed results are reviewed for specific processing regimes and several long term outcomes are presented. Additionally, several specific institutions from a range of countries have documented the in depth analysis of their programme's results which gives an interesting comparison. The section of the book on rehabilitation also moves on from merely documenting results to look at modifications of current practise and the direction of future processing strategies.

The latter chapters reflect on the comparisons between adult and paediatric programmes and the evolutionary pathways followed by units as a result of this. There is an assessment of the potential for future implantation in Europe and a discussion on the cost effectiveness of the procedure. Space limited this discussion, as it had in several other aspects of the subject in the book. Overall this edition represents a good general synopsis of paediatric implantation with input from most of the major units involved in the subject.

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CLINICAL AUDIO-VESTIBULO-METRY FOR OTOLOGISTS AND NEUROLOGISTS, 2nd Edition.

Anirban Biswas. Bhalani Publishing House. 1996. Price £15.

The value of this book lies in bringing a detailed description of both Auditory and Vestibular tests into one volume, and interpreting the results together in diagnostic oto-neurology. The procedure for a range of both auditory and vestibular tests is described step by step such that a novice would be able to conduct the tests to recognized standards. Interpretation of results is tackled with equal attention to detail, making no assumptions of existing knowledge. This approach is particularly welcome in the vestibular section as there are few published handbooks of vestibulometry. At times this approach makes the text somewhat laboured and wordy, but it is a price worth paying if the mystique is to be removed and standards maintained.

The auditory section, begins with a description of the audiometer and its physical principals, going on to describe the physiology of hearing measurement by air and bone conduction. This foundation enables the reader to understand exactly what is being measured bringing a better understanding of the audiogram obtained. Audiometric procedures are carefully and accurately described including masking techniques. The reader has no excuse for over or undermasking, the commonest mistakes in audiology. It would have been appropriate to give the tester insight into the application of pure tone audiometry in younger school children, for example the age at which masking can be attempted. A glaring omission of this section is the detection of non-organic hearing loss eg shadow curves,

although there is a brief description of how to assess non-organic hearing loss in Chapter 5. The examples of audiograms given to illustrate pathology are on the whole acceptable.

The section on localizing tests undertaken with a clinical audiometer only is a welcome reminder of tests that can be quickly and easily done, providing much of the information expected from brainstem auditory evoked responses. Once again the format is detailed step by step instructions and interpretation. The section on the SISI test could have been reduced and the space given to Loudness Discomfort Levels and Most Comfortable Listening Levels which are so simple to do and yet so useful in both diagnosis and rehabilitation. The Stenger test for non-organic hearing loss also deserved, but did not get, a detailed description in this section.

The chapter on Impedance audiometry is thorough, including a good description of the eliciting and interpretation of stapedius reflex threshold and decay. The use of reflex threshold in the assessment of malingerers is mentioned.

The chapter on brainstem evoked response audiometry is also a good comprehensive reference text, highly relevant, and practical. Latency intensity functions are emphasized, and the use of the test for both threshold estimation and site of lesion is well presented.

Other audiological tests described more briefly in Chapter 5 include speech audiometry, Bekesy Audiometry, electrocochleography, and Otoacoustic emissions. Cortical Evoked Response Audiometry is not mentioned, which is a pity in view of its importance in medico-legal work. The section on central deafness found in Chapter 2 would have been more appropriate to this section as these tests are only outlined and involve more than a clinical audiometer. Although paediatric audiology is rightly the province of specialist texts there should have been more emphasis upon the application to children of the tests described in this book, as otoneurological practice is rarely confined to adults exclusively.

The vestibulometry section opens with an understandable summary of vestibular physiology. The principals of electronystagmography (the electrical recording of eye movements) are described and detailed examples given of the various features of the traces obtained. There follows a stepwise description of setting up the laboratory and procedures for recording calibration, spontaneous and gaze nystagmus, saccades, pendulum tracking, postitional and positioning tests, rotatory and rotation tests and the bithermal caloric tests. Interpretation of the traces is carefully and comprehensively explained. Whereas the analysis of positional nystagmus using the Nylen classification for central and peripheral features is acceptable, the interpretation of spontaneous and gaze nystagmus is questionable. Although spontaneous nystagmus is accurately described for evidence of central and peripheral vestibular dysfunction, Alexander's law is not applied to the accompanying gaze nystagmus, causing confusion in interpretation. The role of rotation testing and it's interpretation is well described. Analysis of the caloric test receives the attention which this