will not find this volume as useful as a well-written text book, in that the aim of the book is primarily to highlight developments over the last decade and not detail the entire subject. Nonetheless, the editor has chosen the subjects and authors so as to provide a very comprehensive account of recent

developments. The very diversity of the material covered may mean that few readers will have sufficient breadth of background knowledge to be able to fully understand each article. Indeed, many clinicians will find much of this text of little direct relevance to their clinical practice. Nonetheless, the Editor has directed the authors to address certain specific questions, which must be of importance in understanding auditory and vestibular development in a clinical context. An attempt has been made to relate morphological change to the development of specific functions; to identify the presence and extent of plasticity in regeneration at various levels within the eighth nerve system, as a consequence of injury; to identify the presence and function of growth factors within the statoacoustic system and to identify the extent to which morphological and functional modifications in animals can be applied to humans, and finally to attempt to correlate anatomical, biological and physiological results in animals and humans with respect to their environment.

Certain of these aspects are of direct clinical relevance e.g.development of central auditory function is of particular importance in the intrepretation of evoked potentials; the effect of drug treatment of a mother upon fetal auditory and vestibular development is of the utmost importance and a clear understanding of auditory development is essential if a considered view of the long-term implications of paediatric cochlear implants is to be made.

In conclusion, this book provides a detailed scientific appraisal of many different aspects of auditory and vestibular development. While it will not provide everyday reading for the clinical otologist, it will be invaluable in any basic science research study of the auditory and/or vestibular system. There is an excellent reference list at the end of each chapter and the contributions without exception while dealing with detailed scientific data are clearly and succinctly presented. It can not be recommended as an essential book for the Clinical Otologist, but should certainly be a reference source in every library attached to any department undertaking audiological and/or vestibular research. Linda M. Luxon.

PRACTICAL ENDOSCOPIC SINUS SURGERY

Ed. Vijay K. Anand and William R. Panje. McGraw-Hill Inc: New York 1993. ISBN 0 07 105419 7. Price: £88.00.

Endoscopic sinus surgery was introduced by Messerklinger and Wigand in the late 70's and later popularized by Stammberger and Kennedy. The preface to this book states that it is the direct result of eight years of successfully teaching these techniques at Manhattan Eye Ear and Throat Hospital and of using these in the effective management of patients with sinus disorders.

The book has been written with particular emphasis on the anatomy and pathophysiology of inflammatory disorders of the paranasal sinuses. The first three chapters deal with anatomy, physiology and rhinomanometry. The surgical anatomy and anatomical variants are clearly described and include some original work with the results of some statistical analysis of measurements in 77 specimens. There appears to be some confusion in the chapter on applied nasal physiology which refers to 'The two most common congenital cilia deficiencies are Kartagener's syndrome and immotile cilia syndrome . . . [which] has a similar presentation except that it does not have situs inversus.'—this aside however there is much useful information on cilia, mucus, ciliary flow, olfaction and allergic mechanisms.

Chapter four is written by S. James Zinreich and describes CT scanning of the nasal cavity and paranasal sinuses with particular emphasis on inflammatory disease. The book is worth having for this masterly chapter alone which so clearly describes both the technical details required to obtain the best views of the sinuses and their interpretation to appreciate anatomical variants, pathological changes and their essential use as a surgical map.

The next chapter covers videorhinoscopy and photographic documentation, with some very useful information on the best and the easiest methods available as well as advice on documentation when the budget is not unlimited! This is followed by four chapters, which are effectively the meat of this book dealing with the surgical techniques, avoidance and successful management of complications and 'pediatric' FESS. Some will be interested to read, particularly in a book edited by two surgeons from the United States that while . . . 'Stammberger, Kennedy and other endoscopic sinus surgeons prefer local anaesthesia . . . efficiency, reduced pain, controlled ventilation, especially for asthmatics and avoidance of aspiration are our primary reasons for the choice of general anaesthesia."

A great opportunity is missed in the chapter dealing with sphenoid sinus and pituitary surgery which advocates the transseptal-transspenoidal approach for both hypophysectomy and for dealing with any lesions in the sphenoid sinus (surely the sphenoid is the one sinus where the endoscope is at its most useful and the endoscopic approach for hypophysectomy has been used in many centres). Neither does the endoscope find favour in the chapter dealing with the surgical management of posterior epistaxis where again it has such potential and where one might expect it to be described in a book entitled 'Practical Endoscopic Sinus Surgery'. However an earlier chapter on surgery, indications, diagnosis and technique does describe the endoscopic localization of the anterior wall of the sphenoid and the authors' preferred method of puncturing this and enlarging the opening with a punch, in contrast to entering the sphenoid via the posterior ethmoids as favoured by others.

Cryotherapy and laser applications in endoscopic sinus surgery are each described in separate chapters and the use of the endoscope is suggested, probably rather wisely, simply as an adjunct in orbital decompression. The final chapter deals with rhinologic aspects of acquired immunodeficiency.

Despite some criticisms, Dr Anand and Dr Panje have produced a clear, concise and practical account of the many aspects of endoscopic sinus surgery, its great potential as well as its limitations and dangers and anyone with an interest in this aspect of our speciality will find it both interesting and rewarding.

Ian Mackay.