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Book reviews

Computertomographie. Ed. WOLF-DIETER SAGER and GUNTHER LADURNER. Pp. 184. DM98.00. George Thieme Verlag: Stuttgart. 1979.

The incredible advances in the technique of computerised tomography that have occurred since Hounsfield first introduced the idea are amply illustrated in this small book, which is a collection of papers delivered at a symposium held in Graz in 1978. The principles and clinical applications of the technique are described, and there are sections on neuroradiology and computer tomography of the chest and abdomen. For the ophthalmologist the chapters on intracranial diagnosis will be valuable and serve to demonstrate what impact this investigation has on neurophthalmology and what advantages it has over many of the alternative methods of diagnosis.

T. J. FFYTCHÉ

Documenta Ophthalmologica Proceedings Series. Vol. 21. First International Congress on Cataract Surgery, Florence, 1978. Eds. J. FRANCOIS, A. E. MAUMENEE, I. ESENTE. Pp. 561. US\$121.05. Junk: The Hague. 1979.

The management of cataracts has a never failing interest for ophthalmologists, and this excellently edited volume gives a very clear picture of the state of cataract management and particularly surgery in the western world in 1978. The congress was well planned in order to cover every aspect of the problems involved—social, medical, surgical, and optical—and the papers are divided into 7 sessions ranging between 6 and 15 papers each.

The first session deals with the social aspects of cataract and the broad principles of modern management. Of particular interest in this session was an article on the biochemistry of cataract by A. J. Bron and another broad survey of anaesthesia in cataract surgery by Ariano and Salvoni. The second session deals with cataract in the adult and covers all the technical advances which have occurred around the world, including well tried techniques with which most of us are familiar as well as phacoemulsification and ultrasonic fragmentation. In this session there are 2 particularly interesting papers, that of J. Barraquer on intracapsular lens extraction, and the other by A. E. Maumenee summing up the role of phacoemulsification. The next three sessions deal with congenital cataracts and cataracts of the young, incisions and sutures, wound healing, and surgical complications. Most of these papers are short and to the point, but again the paper by Barraquer was particularly well presented and very neatly illustrated. The last 2 sessions are concerned with the optics of aphakia and with intraocular implants. The organisers of the congress have clearly been at pains not to allow this particularly controversial part of the programme to dominate the proceedings, and the views expressed are varied and well balanced.

Most British ophthalmologists will find nothing specially new in this volume, but there are many excellently

written articles which are well worth reading. It is clear from the wide array of techniques described that there is still no clear indication of what is and what is not correct surgery for cataracts, and the widely differing views fail to show in which way cataract surgery is likely to progress over the next 20 years. There is evidently ample room for improvement and innovation.

A. D. MCG. STEELE

Gonioskopie und Goniofotografie. By W. MÜLLER and H. P. BRANDT. Pp. 163. DM88. Georg Thieme: Leipzig. 1979.

Gonioscopy has always been a difficult skill for the trainee ophthalmologist to learn, chiefly because the objective recording of the gonioscopic appearances is unsatisfactory. This volume sets out to describe the principles and practice of the technique and to display the numerous variations in normal and pathological gonioscopy. A method for goniophotography is described, and there are coloured photographs of the anterior chamber angle with a comprehensive text. Sadly the problems that beset the demonstration of gonioscopic abnormalities still exist, and the definition of many of the photographs is poor. But this is the only criticism of this excellent volume, which is to be recommended to postgraduate students and those working in glaucoma.

T. J. FFYTCHÉ

Abhandlungen aus dem Gebiete der Augenheilkunde. Vol. 48. **Das okulomotorische System, physiologische und klinische Aspekte.** By Hans Drischel and Wolfgang Kirmse. Pp. 214. DM47. Georg Thieme: Leipzig. 1979.

The title of this comprehensive treatise on ocular movements is misleading, since almost all the emphasis is on the neurophysiology of the oculomotor system and there is very little discussion on the clinical aspects that are of interest to the practising ophthalmologist.

Several authors have contributed chapters on subjects related to eye movements and their central control, and much of the contemporary experimental work in man and animals is presented with extensive references. The text contains numerous formulae and difficult diagrams and will appeal more to the neurophysiologist and research worker than to the clinical ophthalmologist.

T. J. FFYTCHÉ

The Mast Cell: Its Role in Health and Disease. Ed. J. PEPYS and A. M. EDWARDS. Pp. 873. £16.50. Pitman Medical: Tunbridge Wells, Kent. 1979.

As long ago as 1863 Friedrich von Recklinghausen noted granular cells in the mesentery of the frog, which Paul Ehrlich named mast cells in 1878. These cells are now recognised to be of major importance in immunopathology, and, although their link with basophil cells is not clear, they both have similarities in that they are recognised as sources of a wide range of potent biologically active substances. The mast cell is fixed in the tissue, and the basophil is a mobile circulating cell. It is now well known that the mast cell possesses receptors

for IgE antibody, so that allergen can combine with specific IgE antibody, which leads to the liberation of the active substances which in themselves can elicit tissue reactions in minute amounts.

This book contains a series of papers presented at a meeting held in Davos, which included basic scientists, pharmacologists, allergists, ophthalmologists, dermatologists, physicians, and ENT surgeons. The mast cell is a link between many disciplines and levels of research, and there can have been few occasions in recent years when the mechanisms of a single cell could have attracted groups of workers drawn from such diverse disciplines.

The mast cell with its specific membrane receptors is positioned where potentially noxious materials are likely to enter the body. It is located free in the bronchial lumen, in the bronchial and gastrointestinal mucous membranes, in intraepithelial sites, and generally in connective tissue around venules. In particular it can be found in the mucosa of the upper respiratory tract and in the conjunctiva. It is capable of producing a variety of vasoactive bronchoconstrictive and chemotactic mediators as well as active enzymes and structural proteoglycans, such as histamine, slow reacting substance, serotonin, platelet activation factor, and the products of arachidonic acid oxidation, which are converted to various prostaglandins. In addition such factors as eosinophil chemotactic factor and granule-associated enzymes such as chymase and kallikrein can be generated. Thus mast cell degranulation produces not only immediate type responses but also factors that attract inflammatory leucocytes, which destroy tissue by the action of lysosomal enzymes, a process that may be followed by fibrosis.

Much of the book involves a detailed analysis of the mast cell and its mechanism of action. The influence of sodium cromoglycate continues to attract enormous interest. A major section is devoted to respiratory diseases and inflammatory bowel disease. Representatives in food allergy, eye, skin, and ENT disease also presented material. In the section on eye diseases the role of mast and basophil cells in allergic eye disease is discussed by B. R. Jones and R. St. C. Dwyer. Papers are presented on the use of radioactive histamine to evaluate the effect of antiallergic drugs in the eye (M. M. Hennawi) and the use of sodium cromoglycate in the management of vernal keratoconjunctivitis (W. M. Doig; J. P. Dawson; R. J. Buckley). The use of a provocation test for the diagnosis of allergic conjunctivitis is described by I. Mikuni by determining the refractive index in tears using refractometry. The similarities between giant papillary conjunctivitis and vernal conjunctivitis are considered by I. A. Mackie and P. Wright, and the part played by mast cells, basophils, and eosinophils in type IV ocular allergy is discussed by A. H. S. Rahi and his coworkers.

The publication is a useful summary of recent work in mast cell structure and its relation to the inflammatory processes. The work shows that links may still exist between broadly divergent fields of endeavour in medicine and should serve as a useful work of reference for those who wish to learn about the recent advances in a rapidly expanding field of immunology. D. L. EASTY

Anterior Segment Fluorescein Angiography. By MICHAEL H. KOTTOW. Pp. 270. \$41.25. Williams and Wilkins: Baltimore, Maryland. 1978.

Fluorescein angiography of the posterior segment has been in clinical use for some 17 years. Angiography of the anterior segment has been available to the clinician for 10 years, and it is therefore an appropriate time for an assessment of this technique to be made in investigating anterior segment disease. Although it can be helpful in the documentation of vascular patterns in corneal and conjunctival disease, it has particular value in the identification of abnormality of the vasculature of the iris. The vessels of the iris which cannot be closely observed with the slit-lamp have tight endothelial junctions similar to those of the retina, so that fluorescein angiography can demonstrate vascular damage in the form of leakage into the iris stroma or anterior chamber. At the same time ischaemic or neovascular conditions may be easily demonstrated.

Dr Michael Kottow has accumulated important information concerning the structure and function of anterior segment vessels and the photographic equipment and the techniques required to document their anatomy and pathology. The fundamentals of interpretation in both normal and abnormal angiograms are discussed in detail. Information is provided on diverse diseases affecting the anterior uvea, including intraocular inflammation, rubeosis iridis, diabetic microangiopathy, occlusive vascular disease, anterior segment necrosis, space occupying lesions of the iris, glaucoma, and retinal diseases which also influence the anterior segment. The author covers a wide field, which should be a valuable aid to the clinician who wishes to avail himself of these techniques, and to those interested in research where a complete review of the literature is required.

The book is written clearly and concisely and is well illustrated. It presents interesting and challenging concepts and highlights the potential advantages of the techniques and the possibilities which exist in correlating changes in the posterior segment with those which occur in the anterior segment. The potential value in the documentation of the various forms of anti-inflammatory therapy are now being realised. The first full summary of work carried out in the field shows that it has many interesting aspects, and it is recommended as a useful addition to the library of those interested in the dynamics of the microvasculature of the anterior segment.

D. L. EASTY

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International Council of Ophthalmology

SIR, The International Council of Ophthalmology met in London on 19 April 1980 at the occasion of the centenary of the Ophthalmological Society of the United Kingdom.

Professor Jules François, president, Dr E. Maumenee, vice-president, Professor B. Streiff, treasurer, Professor



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