

## Book reviews

**The Pathogenesis of Nerve Damage in Glaucoma: Contributions of Fluorescein Angiography.** By GEORGE L. SPAETH. 1977. Pp. 160, figs., tables, refs. Grune & Stratton, New York (£13.85)

The changes in the optic nerve head in glaucoma have usually been explained in terms of either a mechanical or a vascular hypothesis. According to the latter, raised intraocular pressure reduces blood flow through the optic nerve head and the changes which occur are to be regarded as due, at least in part, to ischaemia. Experimental work over the past 10 years has tended to support the vascular hypothesis of glaucomatous damage to the optic nerve, and during a similar period of time there have been great advances in the technique of fluorescein angiography. The practising clinician may well ask, therefore, whether fluorescein angiography will help him in the diagnosis and in the management of glaucoma, and as a matter of more academic interest he may want to know how far fluorescein angiography has advanced our understanding of the basic causes of this disease. All the basic information can be obtained from the journals, of course, but the papers are numerous and some of the results are, not unexpectedly, contradictory. In this book Dr George Spaeth has presented a review of much of the work on glaucoma using fluorescein angiography and other techniques of assessing the vascular circulation in the eye, with an understandable emphasis on his own painstaking and extensive studies. He has tried, from this mass of material, to extract useful answers to the sort of questions mentioned above.

With regard to the experimental approach he points out that many investigations have been concerned with acute transient elevations of intraocular pressure, which may have some bearing on acute closed-angle glaucoma but do not necessarily help to elucidate the causation of changes in chronic simple glaucoma. In general it is clear that fluorescein angiography reveals significant differences in the blood flow through the optic nerve head between patients with chronic simple glaucoma and normal subjects. There are, however, several patterns which can be recognised within the group of glaucoma patients, and this consideration leads Dr Spaeth to put forward a tentative classification into 4 types of glaucoma. In primary hyperbaric glaucoma neuronal damage is directly due to raised intraocular pressure. In primary ischaemic glaucoma the damage is due to ischaemia, which is not, however, related to the elevation of intraocular pressure. In secondary ischaemic glaucoma the elevation of intraocular pressure brings about ischaemia, which causes the damage. In the fourth type of glaucoma there is a mixture of these mechanisms. It is claimed that fluorescein angiography would help the clinician to discover the predominant mechanism of damage in the individual patient. Nevertheless, the conclusion reached is that it will not be practicable to use the current technique of fluorescein angiography on a large scale in the diagnosis and management of glaucoma.

Such is the scope of this book. It is an interesting,

important, and thoughtful review of the problem with a detailed analysis of numerous fluorescein angiograms and other investigations, and is recommended to all who have a particular interest in glaucoma. J. GLOSTER

**Intraocular Tumors.** By GHOLAM A. PEYMAN, DAVID J. APPLE, and DONALD R. SANDERS. 1977. Pp. 382, figs., tables, refs. Appleton-Century-Crofts, New York (£19.95)

The participants in a symposium on intraocular tumours held at the University of Illinois Eye and Ear Infirmary in Chicago recently have combined with other authorities on the subject to produce a valuable and up-to-date book dealing with all aspects of intraocular neoplasms. The editors have taken full advantage of the expert knowledge at their disposal, and all of the contributors have been lavish with the references at the end of each chapter. Apart from a single author from West Germany, the volume is entirely the work of individuals based in the United States.

The book is short enough to be read with advantage by advanced students and is sufficiently comprehensive to be used as a standard reference work. The prominence given recently to the need for improved diagnosis in intraocular malignant disease, particularly with reference to melanoma of the choroid and retinoblastoma, has been emphasised. Full consideration is given to clinical diagnostic methods, to specialised techniques such as fluorescein angiography and ultrasonography, and to immunological advances in tumour diagnosis and treatment.

The benefits to a patient with a malignant melanoma of the choroid consequent upon enucleation are to some ophthalmologists questionable, and a reasoned approach to this important problem is made. The necessity for distinguishing between primary and secondary choroidal malignancy is always present, and modern developments in diagnosis are objectively assessed. The initial diagnosis of retinoblastoma is of equal consequence, and here again the editors have assembled up-to-date information concerning this tumour. Particularly helpful chapters deal with recent advances in the study of retinoblastoma and with current concepts in its treatment.

The volume is one which should find a place in the libraries of postgraduate institutions and in the personal libraries of ophthalmologists specialising in retinal diseases. J. R. HUDSON

**Advances in Ophthalmology.** Vol. 36. Edited by M. J. ROPER-HALL and E. B. STREIFF. 1978. Pp. 254, figs., tables, refs. Karger, Basel (DM188)

The 36th edition of the series 'Advances in Ophthalmology' is a commemorative volume in honour of Professor E. B. Streiff. The book follows the traditional form of this series, with a number of contributions on a variety of subjects from European authors. In all there are 28 articles, of which 11 are in English, 11 are in