Manual of Glaucoma: Diagnosis and Management. By Theodore Krupin. Pp. 257. £32·50. Churchill Livingstone: Edinburgh, 1988.

This short text sets out to provide a basic guide to the identification and treatment of the glaucomas. The authors state that it arose from resident and postgraduate teaching by staff of the glaucoma service at the Scheie Eye Institute, and it can be seen to be directed towards ophthalmologists at a similar stage of their training.

Although the book is the combined effort of several authors, the style of the text is consistent and easy to read. The page format is double columned, and the points for each section are numbered for easy reference. The diagrams are clear and useful. The pictures, however, are too dark, too few, and add little to the text. Each chapter concludes with a brief further reading list.

The book includes chapters on the basic examination of the glaucoma patient, including a useful summary of the state of the art of computer assisted perimetry. Then follow sections on classification, clinical approach to glaucoma, diagnosis, and medical treatment. Chapters on laser and surgical treatment follow. The book concludes with a short chapter on congenital glaucoma.

In providing this short text the authors have produced an easy to read summary of the glaucomas. There are two areas where the American authorship diverges from British views. The first is the need for a significant section on Schiøtz tonometry together with nomograms for computing of scleral rigidity though this hardly finds a place in routine management today. The second is the decision to devote an entire chapter to tonography, again, with an appendix for tonographic tables. By all means mention these for completeness but point out that this method of examination now has no place in clinical management, whatever its role is in research.

In addition to these points there are a number of differences in emphasis between American and British glaucoma management which could be noted in a European orientated second edition. Direct gonioscopy has little place in clinical examination outside the operating theatre. It would be worth pointing out that it is the glaucoma patient from the Indian subcontinent rather than blacks who develop creeping angle closure glaucoma. In the management of coexisting glaucoma and cataract, glaucoma triple procedures should always be considered when the angle is open, while extracapsular cataract extraction alone could be considered in patients with angle closure.

In the section on congenital glaucoma a common error is to rely on standard anaesthesia for measuring intraocular pressure because this artificially lowers the pressure, yet no mention is made of the commonly used drug ketamine, which does not induce this problem.

Finally, there are a number of misspellings, including aceclidine and, at a later stage of the text, the reviewer's name.

The criticisms noted above, however, are minor and correctable. These could easily be inserted for the second edition to which this book deserves to run.

R A HITCHINGS

Molecular Biology of the Eye: Genes, Vision, and Ocular Disease. Eds. Joram Piatigorsky, Toshimichi Shinohara and Peggy S Zelenka. Pp. 471. US$ 96.00. Alan R Liss: New York, 1988.

This book contains the proceedings of a National Eye Institute-UCLA symposium and covers many research areas which are currently using molecular biology techniques. There are sections on phototransduction, evolution of ocular genes such as encoding crystallins and interphotoreceptor retinoid-binding protein (IRBP), gene expression, and differentiation in the lens and retina. Ocular disease is covered in the largest section and describes recombinant DNA mapping of retina pigmentosa genes, the molecular genetics of gyrate atrophy, and Norrie disease. Studies using probes for viruses are discussed, as are the molecular interactions of crystallins in relation to cataract. Oncogenes in both retinoblastoma and the retinal pigment epithelium in proliferative vitreoretinopathy are examined.

This is not an easy book to read, and much of the work presented is written in the jargon of molecular biology, but the discussion summaries at the end of each section are useful.

S LIGHTMAN

Diseases of the Orbit. By Jack Rootman. Pp 628. £79.00. Lippincott: London, 1988.

In writing a major text for ophthalmologists and others concerned with the diagnosis and treatment of orbital diseases Dr Jack Rootman has been able to draw on his experience as both a pathologist and an orbital surgeon. This experience is manifest in the orderly and logical development of the text – from a basic surgical anatomy of the orbit, to the ways in which the location and pathophysiology of orbital disease affects its presentation, and finally to a comprehensive, but very readable, review of orbital diseases.

Throughout the text the clinical importance of the various diseases is indicated, this often being supported by epidemiological data drawn from 10 years' personal experience at the University of British Columbia Orbital Clinic. Furthermore, the text is supported by a good bibliography of both recent and past references. Areas of clinical or pathological controversy are presented as a balanced discussion. The chapter on orbital surgery provides a useful outline of techniques, but might not be sufficient to guide the inexperienced surgeon.

As with any new book there are some errors in the text or the illustrations; these are not, however, of such number as to detract from the interest of the book. The high quality of the illustrations reflects the artistic gifts of the author and, when combined with the excellent printing and binding, produces a beautiful book.

Dr Rootman has written an excellent, readable textbook about orbital diseases, the distillation of his talents as an experienced clinician and pathologist. It is an essential addition to any ophthalmic library, and all ophthalmologists with an interest in diseases of the orbit should purchase a copy.

J E WRIGHT

Diagnosis and Management of Orbital Tumors. By Jerry A Shields. Pp. 401. £80.00. Saunders: London, 1989

Very few surgeons will encounter more than a handful of orbital tumours in their working year and most will hardly ever see some of the less common neoplasms which arise in the orbit. How then, in the absence of experience, is the clinician to distinguish neoplastic from non-neoplastic lesions and the rare from the commonplace other than by reference to an up-to-date account of the various tumours and related disorders which affect the orbit? This book has been carefully planned and serves such a need very well indeed.

The book is divided into three sections and is generously illustrated with line drawings and with well annotated photographs of the clinical, radiological, and pathological appearance of the tumours it describes. The first section comprises a review of pertinent anatomy, diagnostic techniques, and surgical approaches to the orbit. A description of the method of clinical examination is followed by a chapter which deals succinctly with modern radiological investigations, both non-invasive and invasive, with ultrasonograpy and magnetic resonance imaging, and with various biopsy techniques. It concludes with chapters on basic principles of management and on inflammatory conditions which can simulate neoplasms. The second and third sections consider respectively primary orbital cysts and tumours and metastatic and secondary orbital tumours. In a comprehensive review each specific tumour is systematically discussed under the subheadings of definition and incidence, clinical features, diagnostic approaches, pathology and pathogenesis, management, and prognosis. Each chapter concludes with a brief summary.

The subject of orbital tumours has been approached in an extremely practical manner. The format adopted lends itself to ease both of reference and of study so that this book will be valued by the ophthalmologist in training as well as by the experienced surgeon.

JOHN HUNGERFORD

Neurology and Neurobiology. Vol 43. **Dopaminergic Mechanisms in Vision.** Eds Ivan Bodis-Wollner, Marco Piccolino. Pp 276. US $55.00. Alan R Liss: New York, 1988.

The role of dopamine as a neurotransmitter in the central nervous system and its importance in the control of motor behaviour via the nigrostriatal pathways in the basal ganglia is well recognised. There is now increasing evidence of the presence of dopa elsewhere in the nervous system, especially in the retina. In the early 1960s dopaminergic cells were identified in the retina of rats and subsequently in a wide variety of species, including non-human primates and man. A fascinating body of anatomical, biochemical, physiological, and functional evidence regarding dopaminergic mechanisms has accumulated and is reviewed in detail in this book. It is based on the proceedings of the International Brain Research Organisation World Conference in Budapest in 1987. The editors have supplemented these contributions with others from invited authors.

In most species 2–5% of amacrine cells are dopaminergic. The somata are in the inner nuclear layer with dendrites and pre- and postsynaptic terminals in the inner plexiform layer or, in a subset of cells, in the outer plexiform layer. Dopaminergic cells have a widespread distribution over the whole retina, with a density calculated as approximately 20 per mm^2 in man. Both D1 (the subgroup increasing adenylate cyclase activity) and D2 (no effect on adenylate cyclase activity) neurons have been demonstrated, and there is evidence