BOOK REVIEWS


Dyslexia is a condition that may be either developmental or secondary to a large number of other diseases. The American Committee on Optics and Visual Physiology selected this subject for discussion as it is one of the conditions that seems to fall within the province of several disciplines: paediatrics, neurology, education, ophthalmology, psychiatry, and so forth. This book is the outcome of the conference that was attended by workers in all the related fields. It is apparent that the cause of the condition is quite unknown and that the only effective treatment is education. To this end the condition must be diagnosed early and this is not easy when the reading abnormality is the only defect. Within the limitations of lack of knowledge the articles make interesting and informative reading for the ophthalmologist despite the fact that there is no specific ocular lesion. Many of these cases will first present to the ophthalmologist and, in addition to correcting any refractive or oculomotor imbalance, the ophthalmologist should be prepared to refer such cases for further management.

There is a great deal of overlap between the various contributions. It is noted that many workers in the field had to be turned away and in this circumstance it is difficult to justify the article on the development of cortical localization which is an uninformative article on medical history.


The authors of this book have presented a detailed clinical, genetic, and statistical analysis of 776 cases, representing about one-quarter of the total number of persons under the age of 21 years registered as blind or partially sighted in England and Wales in 1963. In about 50 per cent. of the children examined the visual handicap was found to be due to genetic factors; in the remainder of cases ante-natal or post-natal environmental influences were the primary cause of the visual defect and, in the older children particularly, the commonest cause of blindness in this group was [not unexpectedly] found to be retrolental fibroplasia.

This is, of course, not a comprehensive account of the subject, and it might have been better had the authors qualified their title by indicating that it related only to an incomplete survey from one Western European country. Within the sample studied there was, in addition, a marked bias in the selection of cases towards the older age groups and the higher educational grades. Despite these limitations, however, the authors have by their detailed analysis made significant contributions towards the future prevention of many visual defects, as well as presenting a useful catalogue of the causes of blindness in childhood, supplemented by an excellent bibliography of the conditions described. The detailed presentation of many pedigrees is of importance in increasing our understanding of the hereditary pattern of genetically-determined eye disease, and by highlighting those adverse environmental factors which most commonly cause visual defects in the young at the present time the authors have helped to assure their future elimination.


An interesting symposium on the microsurgery of the eye was held at Tübingen in association with the XX International Congress in 1966, the report of which has now appeared as a special issue of Advances in Ophthalmology. The symposium occupied five sessions and its participants included a number of outstanding surgeons from many countries in the world. The manipulability of oculomotor operating microscopes, new techniques in illumination and, particularly, the introduction ofatraumatic needles with fine suture material have all combined to promote microsurgery from its formative personal stage to a well-recognized and widely-adopted technique allowing surgical
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procedures to be carried out with a delicacy and accuracy not obtainable with conventional surgery. Microsurgery is very specialized and the equipment is expensive but there seems no doubt that it has come to stay with us. No better outline of the difficulties it presents or the potentialities it offers can be obtained than in this useful and interesting symposium.


The sixth edition of this popular handbook of ophthalmology, originally written by P. A. Jaensch in 1947 and now under the authorship of F. Hollwich of Münster, has now appeared. Its deserved popularity is attested by the fact that its predecessor was published only in 1966. The volume is well and clearly written, containing the elements of ophthalmology in a form suitable for the medical student or general practitioner and is elaborately provided with 340 illustrations, many of which are in colour.


The headlines of the five chapters of this booklet are:

1. Basic human chromosology,
2. Chromosomal aberrations related to the clinical findings,
3. Teratological findings in orbital anophthalmos and cranio-facial dysplasias observed in a special breeding of mice,
4. Ocular histopathology in Dr.-(13, 14, 15) trisomy,

In the reviewer’s opinion the authors of chapters 1 and 2 have not made it easy for the average ophthalmic reader to understand the marvellous way in which the genes direct the phenotypic structure and especially the malformations of an organism. It appears to be no less a miracle how the deoxyribonucleic acid chains of the genes send ribonucleic acid chains as messengers to amino acids to form specific proteins. It appears that the influence of the genes on the developing structure is an indirect one. Thus, it is often not permissible to relate a malformation to the disturbed function of a definite gene. The third chapter deals with a genetic form of anophthalmos in a particular breed of mouse. A rudimentary developed eye in the orbit or in the cranial cavity could be found in these cases. Another chapter deals with trisomy 13-15 of Patau, in which hare lip, polydactyly, and folding of the lids are conspicuous. The last chapter, which occupies about one third of the book, contains precise guide-lines for the plastic surgeon who may be called to correct genetic errors of nature.


As could be expected from the pen of R. Seitz of Karlsruhe, this is an excellent book. It is probably the fullest account in the literature of this vast and important subject. After an initial description of the clinical appearances and histology of the normal retinal vessels, a large section deals with the various pathological changes they may undergo, both the ophthalmological and histological appearances being described in detail. This includes such phenomena as the pathological changes at the arterio-venous crossings, sheathing, those seen in sclerosis, hypertension, and in a host of other conditions. The final and largest part of the book deals seriatim with the diseases in which the retinal vessels participate. These include arteriosclerosis, hypotony and hypertony, renal disease, eclampsia, obstruction of the arteries and veins, carotid occlusion, the blood diseases, diabetes, periarteritis nodosa, perihebitis, cirkinate retinopathy, miliary aneurysms of Leber (which includes Coats’s syndrome), angiomatosus, and so on. The descriptions are full, the fundus photographs and the illustrations of the histological appearances are excellent, and the bibliography is useful.