BOOK REVIEWS


We seem to be growing wiser very rapidly; the extent of this growth is seen in what has happened to Hugh Davson's "Physiology of the Eye". The first edition, which appeared in 1949, was relatively small and yet gave a clear and concise account of as much of the subject as was necessary for the junior student to know. The second edition has increased 50 per cent. in size and the author claims that its aims are unchanged—to present a simple yet thorough exposition of the fundamental principles of ocular physiology. And he is right, for the advances in this subject over the last decade, both in the vegetative physiology of the eye and in the physiology of vision, have been immense and have completely transformed a branch of knowledge which 10 years ago was seeking adequate expression. Indeed, the reader cannot but admire how compact the book remains and how it retains its simple and fundamental character when he recalls how much original work has been done in the interim and how revolutionary it has been. The entire field of visual physiology has been covered—vegetative physiology and biochemistry, visual physiology, the muscular mechanisms, visual perceptions and visual optics; the book is an excellent introduction to the more elaborate four-volumed treatise edited by the same author.


This study is based on 630 cases occurring in the Netherlands where the incidence of the classical form of hydrophthalmia was found to be 0.0056 per cent. The percentage of heterozygotes among the general population was calculated at 2.34 per cent. The geographical distribution was uniform, except in one area where the proportion of consanguineous marriages was known to be higher. Bilateral cases predominated, forming 75.3 per cent. of the total. In 93.7 per cent. of cases the condition was recognized when the patient was less than one year old. 276 of the 630 patients could be designated as "blind". A familial incidence was disclosed in 16.7 per cent. and consanguinity in 1.4 per cent. The penetrance of the condition was calculated at 40–56 per cent.

Lack of treatment usually led to blindness, only four eyes retaining a good degree of function without it. Miotics were effective in five out of 72 instances. The percentages of success which followed different operations should be taken with some reservation. Cyclodiathermy seemed to be the most successful procedure, followed by iridencleisis and goniotomy in that order. Goniotomy alone proved to be sufficient in 47.7 per cent. of the cases, and additional procedures brought the percentage of success to 77.8 per cent. After the first year, however, goniotomy was never successful. Complications were rare. Non-perforating diathermy was equally beneficial, but again its successes were confined to the first year of life. A close follow-up is essential because the operation has often to be repeated. Iridencleisis was performed in a small number of cases but there were relatively frequent complications—secondary cataract and the formation of a hammock pupil. Elliot's corneo-scleral trephining was found to be inferior to the methods of goniotomy and non-perforating cyclodiathermy; however, if the initial procedure does not bring the intra-ocular pressure within normal limits, the chance of success with subsequent surgery is considerably less in a trephined eye than in one which has undergone goniotomy or a
non-perforating cyclodiathermy. It is recommended that fistulizing procedures should be reserved as secondary operations and for late cases in which Schlemm's canal may be expected to be obliterated. The author is to be congratulated on an excellent survey.


An excellent interpretation for the general practitioner of the main points in ophthalmological examination which may affect his work. Visual fields, papilloedema, refractive errors, subjective visual disorders, headache, squint, and hypertension are all dealt with clearly and concisely, and the diagrammatic figures complement the text in their clarity.

NOTES

ASIA-PACIFIC ACADEMY OF OPHTHALMOLOGY

II Congress, 1964

The Second Congress of the Asia-Pacific Academy of Ophthalmology is being held in Melbourne, Australia, from April 5 to 10, 1964 (i.e. the first week after Easter).

The Congress President will be Sir Norman Gregg, and the Vice-President and Chairman of Committees will be Dr. Ronald F. Lowe.

The programme includes two Symposia, five Lectures on "Recent Advances in the Basic Sciences pertaining to Ophthalmology", a series on "The Prevention of Blindness in the Asia-Pacific Area", and free papers. Contributors are invited to offer free papers at the Congress and also to exhibits in the Scientific Exhibition.

Included in the programme is the second Norman McAlister Gregg lecture which is to be presented by Prof. Ida Mann.

The Committee extends a cordial invitation to all ophthalmologists and their families. Application forms and further information are available from The Secretary; Dr. R. N. Mellor, 82 Collins Street, Melbourne, C. 1. Australia.

MIDDLEMORE LECTURE, 1963

Mr. H. B. Stallard has been appointed to give the Middlemore Lecture in Birmingham in October, 1963.