
The author has tried to make the electro-oculogram (EOG) into a reliable ocular test by standardizing the technique and analysing the intrinsic sources of errors of the method. The EOG is the expression of the potential difference between the positive cornea and a layer at the back of the eye, in all probability the pigment epithelium. This potential is increased by illumination in proportion to the log of the light intensity. This corresponds to the bleaching curve of rhodopsin. A series of factors has to be taken into account. The movement of the ocular muscles can be recorded, but the position of the eye in the orbit is more difficult to judge and the variable electrical resistance of the orbital tissues and the influence of psychogalvanic reflexes are even more difficult to assess. Though the results of the test show wide variations the author believes that it may lead to valuable conclusions about the condition of the pigment epithelium. The diagnostic value is enhanced when the EOG is compared with the electroretinogram, which can show the function of the visual receptors of the retina. The author has done this in a large number of standard fundus changes. The results in albino eyes are not given. Each chapter of this small book is preceded by a useful bibliography and a short discussion of the author's views.


Many authors have dealt with the external factors influencing the results of visual acuity tests. These factors comprise illumination, distribution of the illumination, contrast, type and colour of the test objects, adaptation of the eye, length of presentation, and movements of the eye or of the test objects. Less has been written about the more difficult assessment of the internal factors, the disposition of the examiner and the examinees.

The authors examined a number of healthy subjects with various test types, but did not obtain a strict relation between the results. The standard used by the examiner is important for the determination of the visual acuity. The examiner who accepts for his assessment only the lines read before the first error is made will find a lesser degree of vision than the examiner whose criterion is two consecutive errors. It is remarkable that intelligence seems to have little influence on the result of the test, but a better result is usually achieved when the test is repeated. An appendix surveys the statistical formulae and pictures of optotypes used. The reviewer doubts whether the visual acuity is a quality which can be subjected in the same way as physical data to the Gauss error calculations.


The time devoted to the teaching of ophthalmology to undergraduates has been steadily diminishing. Thus the student eagerly seeks after a small compact textbook which will give him an introduction to the subject and a framework on which to base further study. The fact that this small and inexpensive book is appearing in its fourth edition is proof of its success.

Several new subjects have been introduced, such as fluorescein angiography, ultrasonic techniques, and the use of lasers. There is also a welcome increase in those sections associating ophthalmology with systemic and iatrogenic disease. However, many of the more important advances, such as the use of cryosurgery for retinal detachment and the development of microsurgery, are ignored. It could be argued that such a book is not the proper place for a detailed account of surgical methods and the intended readership would lose very little if they were omitted. Also, such compression of a subject makes for an indigestible book, the more so considering the paucity of illustrations—but not everyone will have either the time or the inclination to read the larger texts—for them this synopsis will prove a ready source of much information.