The Standardization of Visual-Acuity Tests for Medical Examinations and Reports

A.Th.M..

van Balen

Rotterdam

Author's address: Dr. A. Th. M. van Balen, C.N.A. Looslaan 70, Rotterdam 13 (The Netherlands)

The proposed test-type chart is now available and the lighting arrangements are easy to realize. The theoretical considerations have been made clear in an incomparable manner by Vos [T. soc. Geneesk. 47: 1–19, 1969] in his report.

It seems to me that no one can doubt the necessity of comparable conditions, at least as far as examinations and reports are concerned.

Vos has pointed out that the different test-type charts are not comparable, and all of us know from our own experience that the visual acuity we find is nearly always different from that found by a colleague.

We have always accepted this on the grounds of the conviction that this is a psycho-physical observation, open to the influence of all sorts of psychological factors. Let us, then, at least make sure that the physical part of the determination is definitely established.

Landolt's ring has been chosen because this can be more easily standardized. Letters and numbers cannot be standardized because the differences in one line are not markedly less than differences between the lines.

As early as 1909, Landolt's ring had been accepted as standard by the 11th International Ophthalmological Congress (and also by the standardization commission of the DOG).

The lighting must also be seen as an important part of the standardization [cf. DOG and British Standardization Commission].

There is nothing new about our chart. Everything can be found in the literature. It is only necessary to get it systematically used.

Standardization only serves a purpose if it is carried right through, if it can be depended on in contact between colleagues. Your co-operation is therefore necessary.

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It seems to me that we owe it to our special branch, which can pride itself on reasonable accuracy in the measurement of symptoms as compared with other branches of medicine, to make use of a standard more frequently.

Discussion

Janssens Capriles: Considering present-day requirements, I certainly believe that a technique for obtaining standardized visual acuity is needed.

It is, therefore, very commendable that Dr. van Balen and co-workers have tackled this problem thoroughly and have produced well-thought-out propositions. The practising ophthalmologist often has to determine the refraction, whereby he must also show the patient that he can recognize well-known objects (not geometrical figures but letters, for instance). This

determination must also be carried out rapidly and in a way which is not too difficult for the average patient. The instruments and methods used are very diverse and individual, and this subject is not discussed here.

In the report cited, the difference between these tasks and the task of performing a standardized visual-acuity determination is mentioned, but the differentiation is not always maintained. It does not seem to me, for instance, to be fair to run down an instrument designed for the determination of refraction because it is not suitable for the determination of standardized visual acuity. It has not been intended or constructed for that purpose.

I have never, so far, seen an arrangement which is ideal for both purposes at the same time.

Without experience with the proposed test-type chart, I think I can say on theoretical grounds that it will not be ideal for both purposes. As long as this is not our aim, the project has possibilities. I, therefore, make a plea for keeping the arrangements for the determination of standardized visual acuity and those for refraction separate.

Van Balen: I am in complete agreement with Dr. Janssens Capriles. The determination of visual acuity and of refraction are two different things. Among the group who tested the proposed arrangement for visual acuity determination for you in practice, however, there was one ophthalmologist who used the same arrangement for the determination of refraction and found it very satisfactory.

This is not my own experience; but

I repeat

this is no reason for not using a standardized method of determining the visual acuity for medical examinations and reports.