Fundus Television in the Study of Fixation Disturbances

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Abnormalities of fixation may be recorded by means of electro-nystagmography and fundus photography (with fixation pin). Both methods have their disadvantages: in a nystagmogram the location of the fovea with respect to the image of the fixation object cannot be seen; on the other hand, fundus photography does not do justice to the dynamic nature of the fixation process. Fundus television during fixation of an object fitted in the camera is the ideal solution for the study of the movements of the central fovea with respect to the image of the fixated object. It has proved possible to obtain a sharp fundus picture without blinding of the retina, thanks to a new Philips television camera with light amplification (fig. 1,2).

A film has been composed of the video picture of some ten patients. Fundus television is particularly suitable to demonstrate types of nystagmus with different components, for example the rotatory component in latent nystagmus. In other patients a striking feature was the phenomenon of bifoveal instability, described by Hermann and Priestley [1965]. It is a slight bilateral, excentric fixation with a greater or lesser tendency to latent nystagmus. Other cases studied with the new method concerned: heterotopia of the central fovea, bilateral excentric fixation in a case of optic atrophy caused by chlomamphenicol, bitateral excentric fixation in juvenile macular degeneration and fixation in cases of bilateral cicatricial toxoplasma choroiditis. The fundus lesions can be better visualized by fluorescein television.

Fig. 1,2

Reference

Hermann

J. S. and Priestley

B. S.: Bifoveal instability. The relationship to strabismic amblyopia. *Amer. J. Ophthalm.* 60: 452–459 (1965).