

THE USE OF COCAIN IN MEASURING THE AMOUNT OF HETEROPHORIA.*

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[Written for the *Annali di Ottalmologia* and the ANNALS OF OPHTHALMOLOGY. Translated into English by Casey A. Wood, Chicago.]

PRELIMINARY NOTE.

In attempting to determine the degree of heterophoria we are confronted by certain difficulties, the principal one being the tendency of the double images to coalesce, so that either a portion or the whole of the muscular defect is masked. In the article by Stevens,† in the Norris and Oliver System of Diseases of the Eye, he refers to this obstacle and says that "in all examinations relating to the equilibrium of the eye-muscles the fact that the element of voluntary effort on the part of the person examined can rarely be eliminated is not to be underrated." Further on‡ he states that if prisms of certain strength are employed, diplopia may be induced; and on the theory that, single vision being impossible, the voluntary effort to adjust the eyes will be withdrawn, it is assumed that the visual lines will take the direction which would be given by the minimum nervous impulse acting upon the eye muscles. "This assumption is true only in a measure, and is often without foundation in fact, as it is frequently impracticable for the individual to permit the eye muscles to become entirely passive. Notwithstanding the imperfections of this theory, we possess no method of investigation in heterophoria so available as the artificial induction of diplopia." There is, however, another consideration. In heterophoria the muscle or groups of muscles that are continually obliged to exert themselves in a direction opposite to that which the eye has a tendency to deviate

*Applicazione della cocaina per determinare il grado dell' Eteroforia.

†G. T. Stevens. The principals of and the methods for the estimation of the balance of the extra-ocular muscles. Vol. II, page 170.

‡Loco. cit., p. 174.