Eye-Strain

The gradual adaptation of the human eye, as civilization progressed, to the accurate close work demanded by that process, so different from its original function chiefly concerned with distant quick motion as in the animals, is doubtless a factor in that much-used, and sometimes abused, term known as eye-strain. This adaptation has, however, become so perfect in the course of time that it has always seemed to us that those who support the theory that eye-strain can be the primary cause of such diverse conditions as epilepsy, indigestion, and migraine overlook one very important fact; viz., that our eyes are given us to use and that with a healthy body and a healthy mind, the musculature of the eye should be capable of doing its work without causing pain, just as the heart muscle beats all through life without, as a rule, giving rise to cardiac pain, and as the muscle of the gut acts without giving us spasms of colic all through the day and night. No one will dispute the pain of a sudden cramp; but the pain of eye-strain is hardly ever acute; it is usually a dull ache. Acute pain in the eye, excluding the presence of a foreign body under the lid or embedded in the cornea, is usually due either to acute inflammation, such as iritis or to raised pressure such as occurs in glaucoma; or it is a reflex pain, referred from a diseased tooth or from some other structure in the region supplied by the fifth nerve.

We have often wondered at the amount of work done by the eyes of men and women of long ago, before the use of spectacles was general. Samuel Johnson accomplished a prodigious amount of work with his eyes and apparently had only one useful eye on which to rely. We suppose that we shall be told that his irritability was due to eye-strain, and that his flatulent nights were caused by his eyes. We doubt it.

Consider the samplers worked by the eighteenth century female; the fine lace-work done by hand; the work of the manuscript writer, and that of the illuminator of missals. Those who have had experience in reading ancient records will agree that the study of some of the handwriting of the early clerks is as trying to the eyes as any form of ocular work; how trying it must have been to the clerk of the thirteenth century who engrossed a charter or a final concord on a small slip of parchment, every letter usually perfectly formed and with the contraction marks which mean so much, it is difficult for anyone to imagine who is unacquainted with this style of work.
We do not wish to appear as denying the effects of eye-strain at the present time; the results are obvious in many cases; the rush and hurry of modern life must have much to do with it, but we are convinced that we may often be in error in concentrating all our attention on the eyes and the error of refraction, without paying due attention to the patient's general health. We wish that we could meet with some account of an old monkish chronicler who suffered in the use of his eyes; we know of nothing earlier than the case of Samuel Pepys.

ABSTRACTS

I.—NEUROLOGY


(1) In a child aged 4½ years suffering from brain disease (exact diagnosis apparently not made and no post-mortem examination) Garvie noticed that the pupils, widely dilated during waking hours, were contracted, and reacted to light during sleep. In order to explain this phenomenon the author suggests that the blocking of the light reflex during waking hours was due to a congestive disturbance leading to increased pressure on the third nerve, and he quotes Halliburton as follows:—"Plethysmographic records from the arm of a sleeping man show a diminution in the volume of blood every time he is disturbed, even though the disturbance may not be sufficient to awaken him. This is interpreted as meaning a diminution of the blood in the body and a corresponding increase in the blood flow through the brain."

Ernest Thomson.


(2) de Monchy's case is of considerable interest in view of the unusual nature of the symptoms recorded. The tumour, as found at the post-mortem examination, consisted of two parts connected by means of connective tissue, one part lying in the situation of the epiphysis, the other part between the folds of the dura mater, where the falx cerebi and the tentorium cerebelli meet. Microscopically (a photomicrograph accompanies the plate), it resembled the tumour described by Löwenthal as a "teratoma maligna" (Ziegler's Beiträge Pathol. Anat. 1920). The main point of