

conditions in which morphia is indicated: but I know of no advantage which morphia can claim over chloral, either in certainty or rapidity of action, while it must suffer in comparison on account of its tendency to lock up the secretions and to produce cerebral congestion.

These three, chloral, chloroform, and opium, comprise the principal nerve sedatives of use in this affection. Bromide of potash may be used as an adjunct, though not of sufficient power to be depended on alone. In speaking of opium the mind naturally reverts to its old antagonist in the field, bloodletting. Of this I will only say that the weight of opinion seems to be that it should be reserved for those cases where the condition of the patient would indicate danger of cerebral hemorrhage.

When there is good reason to assume that the convulsions are of uraemic origin, in addition to the measures directed especially to the nervous system, we would simply use such means as would be appropriate in uraemia under other circumstances, the details of which I will not inflict upon you, except to refer to the preventive milk diet, which unfortunately in a country practice we are seldom in a position to apply as the patient is generally in labor or convulsions before our services are demanded.

Dr. Wm. Carter in Braithwaite for Jan'y. '87, says: "According to Bouchard one-fifth of the total toxicity of normal urines is due to poisonous products re-absorbed into the blood from the intestines and resulting from putrefactive changes which the residue of food undergoes there. If a healthy man is fed for a given length of time on an ordinary mixed diet, and then for an equal length of time on milk alone, the urine of the second period is much less poisonous to animals, when injected into their veins, than that of the first, hence the great value of milk as an article of diet for the Brightic."

The *Canada Lancet* for March, '89, publishes a table giving the comparative results of the various methods of treatment, which, taken as it stands, makes an excellent showing in favor of this plan, and, where applicable, it seems to be a most rational one.

NEUROSES AND OCULAR DEFECTS.

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THE subject to which I am about to refer is alike interesting to the general practitioner, the neurologist, and the ophthalmologist; a subject which, at the present time, is calling forth much attention from the medical men of this city.

I refer to the relations, real or apparent, existing between the oculo-motor muscles and various functional nervous manifestations, as well as to the operation of partial tenotomy of one or more of the ocular muscles when a condition of *heterophoria is

* A term used to designate a tending of the visual lines in a condition other than parallelism, a condition calling forth a greater expenditure of force to maintain binocular vision than when the muscles are in a state of perfect equilibrium.

associated with functional nervous disorders. It is held by those who believe that insufficiencies of the ocular muscles play an important role in the causation of functional nervous diseases, that the operation is justifiable, being in a large percentage of cases followed by good results.

In 1883, Dr. G. T. Stevens of New York, in presenting his "Memoir of Functional Nervous Affections" to the L'Académie Royale de Médecine, of Belgium, based conclusions upon observations in over three thousand cases of nervous diseases, conclusions stated in the following proposition:

"Difficulties attending the functions of accommodating and of adjusting the eyes in the act of vision, or irritations arising from the nerves involved in these processes, are among the most prolific sources of nervous disturbances, and more frequently than other conditions constitute a neuropathic tendency." This you will perceive is an extreme proposition, a proposition which, in its entirety, has many opponents and but few defenders. The author holds that the hereditary neuroses, such as neuralgia, chorea, insanity, migraine and epilepsy, are not transmitted directly from parent to child but that physical peculiarities are, of which the neuroses are but manifestations, and that among these peculiarities abnormal conditions of the eyes are among the most frequent and important. At the New York Neurological Society, held in the Academy of Medicine in March, 1887, Dr. Stevens read a paper on "Irritation arising from the visual apparatus considered as elements in the genesis of neuroses." The conclusions arrived at in that paper were based upon five thousand cases in private practice, besides a large number in public institutions, and were stated as had previously been done by the author in the above mentioned memoir. Several pairs of photographs of neurotic cases were exhibited, the first taken at the beginning of treatment, the second a month or more later, the latter showing remarkable changes in physiognomy, changes which were almost certain to follow after the relief of some distressing oculo-muscular tension. So said Dr. Stevens, who claimed a record of fifty per cent. of his epileptic and choreic cases treated by this method, remaining well for a length of time varying from many years down to a single year, and all being better without drugs than they previously had been with them. The drift of the discussion which followed and which was participated in by Drs. Seguin, Noyes, Roosa, Knapp, Gruening, and Ramney, was to the effect that regarding the etiology of the neuroses it was necessary to look far beyond exciting and superficial causes, to hereditary pre-dispositions and faulty tendencies, and that while an impaired optic or genital apparatus might aggravate, they could never stand in the place of essential causation.

Skepticism on the part of leading neurologists and ophthalmologists concerning the astounding benefits to be derived from the treatment of neurotic cases by the "Steven's method" or by partial tenotomies of the external ocular muscles, when a condition of