The incidence of fever and leucocytosis in multiple sclerosis.—J. B. McKenNA. *Arch. of Neurol. and Psychiat.*, 1930, xxiv, 542.

The author investigated the occurrence and incidence of abnormalities of body temperature and of leucocyte count in 109 cases of disseminated sclerosis.

In 40.4 per cent. there was neither fever nor leucocytosis, but three showed increased cell counts in the cerebrospinal fluid; 55.9 per cent. showed elevations in temperature, 44.9 per cent. between 99° and 99.5° F. and 11 per cent. between 99.6° and 100° F.; 22.9 per cent. showed definite leucocytosis, 3.6 per cent. occurring without elevation in temperature and 19.3 per cent. accompanying febrile reactions. Pleocytosis of the cerebrospinal fluid occurred in nineteen cases, or 17.4 per cent.; three of these cases showed normal temperatures and leucocyte counts; seven were accompanied by fever alone; two by leucocytosis alone, and seven by both fever and leucocytosis.

R. M. S.

Myatonia congenita—E. S. GurDJIAN. *Arch. of Neurol. and Psychiat.*, 1930, xxiv, 52.

Several cases of myatonia congenita are reported. In one case in which an autopsy was performed microscopic examination of the nervous system and striated muscle indicated involvement of both. There was marked change in the anterior horns and abnormalities in the muscles which could hardly be merely the reaction to pathological changes in the anterior horns. The author suggests that a common factor, and probably a toxic one, involving the neuromuscular system may be responsible. In favour of this assumption are the postnatal cases of this disease with an onset usually after an acute infection.

R. M. S.

PROGNOSIS AND TREATMENT.


A very long article reviewing recent work on epilepsy and advancing the theory that fluid control and water balance play a large part in the cycle of convulsive attacks and that the major forms of the seizures can be modified or controlled with proper regulation of these factors. The author thinks that epilepsy (as well as other mental deficiencies) has an understandable hydraulic pathology and that certain structural traumatic and inflammatory considerations are present in the majority of these conditions. Full consideration must be given to the physiological and vasomotor factors which complicate the problem, and an exact means of study by encephalography and all other methods at our disposal.
disposal must be applied to the solution of every case. It is evident that there cannot be a ‘cure’ of what appears to be a normal physiological response under certain conditions: the control of the factors surrounding the production of this response must include all of the accepted methods—whether medical, surgical, dietary or dehydrating depends on the indications furnished by the patient’s case. We may thus expect amelioration of the seizures or their control so long as the individual’s ability to maintain and compensate a normal life in the presence of deficient structural and physiological mechanisms makes it possible to do so.

The author is convinced that the predisposing factor concerned with the major but not necessarily with the minor attack is due to a hydration state however induced—whether local or diffuse—and that proper control of this factor whenever possible gives rise to an attack-free existence, which may continue so long as the patient’s water metabolism or fluid balances remain within the limits of proper compensation.

R. G. G.

**Psychopathology.**

**PSYCHOLOGY.**


The ability to awaken at given times in the morning is one approach to the problem of the temporal judgment during sleep. The writer here records the results of his experiments in this direction. His procedure was to record, on retiring, the approximate time of going to sleep, the time chosen for awakening, and ratings on such factors as general physical condition, degree of mental alertness previous to retiring, motivation, and the amount of sleep on the previous night. Then the suggestion for awakening was given by repeating ten times subvocally: ‘Waken me up at x o’clock.’ The time of awakening was taken as the time when consciousness was sufficiently regained to look at the clock, and it was recorded to the nearest minute. Other conditions recorded were: illumination in the room, dreams, general physical condition during the first half-hour after awakening, and the ‘purity’ of the determination (i.e. the amount of subsequent mental activity before dropping off to sleep). It was found possible to ‘judge’ time with considerable accuracy during a period of sleep. The ‘judgment’ appeared as awakening under a determination. The average actual time of awakening was far closer to the time set in the experiment than to any time, absolute or relative, that one might have expected for the awakening on the basis of habit. Certain conditions appear as favourable.