

giving rise to a *status spongiosus*. A connective-tissue framework arising from the blood-vessels forms a supporting structure for the degenerated areas.

G. W. T. H. FLEMING.

Sedimentation Rate of Red Cells in Malarial Therapy. (*Riv. Speriment. di Freniatria*, liv, 3, September, 1930.) *Benvenuti, M.*

The author has investigated the sedimentation rate in general paralysis and in non-paretic syphilis. He regards the increased sedimentation rate which occurs in the former as an aid to differentiation from the latter. The sedimentation rate in general paralysis, often high before malarial treatment, may reach a very high level during such treatment. On occasion malarial therapy brings the sedimentation rate to normal.

H. W. EDDISON.

The Blood Electrolyte Changes in Narcosis, with Special Reference to Calcium and Potassium. (*Arch. of Neur. and Psychiat.*, September, 1930.) *Katzenelbogen, S.*

The author investigated the blood chemistry in rabbits under narcosis induced by ether in 10 animals, and by dial in 58 experiments on 41 animals. He found no significant modifications in the CO₂-combining power or the phosphorus or magnesium contents. Potassium does not behave in a characteristic manner in narcosis, but there is always a decrease in calcium. There is a distinct relation between the rate of the decrease of calcium and the duration of sleep. In 14 out of 15 experiments the longer the sleep the greater the decrease of the calcium.

G. W. T. H. FLEMING.

Comment on the Mechanism of Narcolepsy. (*Journ. of Nerv. and Ment. Dis.*, October, 1930.) *Wagner, C. P.*

The author summarizes briefly the literature on narcolepsy and describes two cases of his own. One case showed both sleep and cataplectic attacks, and the other cataplectic attacks only. In his first case the author was able to produce a cataplectic attack by an intravenous injection of afeuil (a preparation of calcium chloride and urea). This patient's blood calcium, which had been 11 mgrm. per 100 c.c. of blood, was 16.5 mgrm. at the end of five minutes after the injection; in the healthy subject the figure should have returned to normal. Wagner thinks that there may be a momentary hypercalcæmia during a cataplectic attack which reduces muscle irritability to the extent of complete loss of muscle tonus. If calcium balance is controlled by an area in the floor of the third ventricle, may not a lesion in this region, by producing a disturbance of calcium balance, be responsible for the sleep and the cataplectic attacks?

G. W. T. H. FLEMING.

The Incidence of Fever and Leucocytosis in Multiple Sclerosis. (*Arch. of Neur. and Psychiat.*, September, 1930.) *McKenna, J. B.*

The author studied the records of 109 verified cases of multiple sclerosis with reference to changes in temperature, leucocyte count

and state of the spinal fluid: 40·4% showed neither fever nor leucocytosis, but 3 showed increased cell counts in the spinal fluid; 55·9% showed elevations in temperature, 44·9% between 99° and 99·5° F., 11% between 99·6° and 100° F.; 22·9% showed definite leucocytosis, 3·6% occurring without elevation in temperature, and 19·3% accompanying febrile reactions. Pleocytosis of the spinal fluid occurred in 17·4%; 3 of these cases showed normal temperatures and leucocyte counts, 7 were accompanied by fever alone, 2 by leucocytosis alone, and 7 by both fever and leucocytosis.

G. W. T. H. FLEMING.

The Nuclei of the Region of the Tuber Cinereum: Degenerative Changes in Cases of Epilepsy, with a Discussion of their Significance. (Arch. of Neur. and Psychiat., August, 1930.) Morgan, L. O.

The author examined the nuclei of the tuber cinereum in six epileptic brains. He found marked shrinkage and often hyperæmia in the wall of the third ventricle and at the base of the tuber cinereum. The cells of the substantia grisea were reduced to from 15–35% of the normal number. Chromatolysis was general among the remainder. The glia-cells were increased to two or three times the normal number. Neuronophagia was common. In the nucleus tubercularis there was a loss of 35–80% of the cells, with marked widespread chromatolysis among the remaining cells. In the nucleus tubero-mamillaris the cell loss varied from 15% in one case to 35–55% in the other cases. 60 to 85% of the remaining cells in this nucleus showed chromatolysis. The author thinks that the three nuclei of the tuber may be secretory centres for the thyroid, parathyroid and suprarenal glands, and that the degeneration in the substantia grisea of the third ventricle is concerned with the mental deterioration of the epileptic.

G. W. T. H. FLEMING.

The Pituitary and Hypothalamic Region in Chronic Epidemic Encephalitis. (Brain, April, 1930.) Eaves, E. C., and Croll, M. M.

This is a detailed histological study of a series of ten cases, well illustrated with photographic reproductions.

The authors find that—

(1) In chronic epidemic encephalitis there is frequently some change in the pituitary.

(2) The hypothalamic region of the brain is more severely affected than any other area except the substantia nigra of the mid-brain. The changes in the two regions are usually, but not invariably, parallel.

(3) The changes in the hypothalamic region were greater than in cases of Huntington's chorea and general paralysis of the insane, which showed severe degenerative changes elsewhere.

The relations of sleep, cachexia and hæmorrhages to the general pathological picture are also discussed.

WM. McWILLIAM.