

Disseminated Demyelination of the Central Nervous System in Monkeys and Allied Disorders in Man. (*Journ. Neur. and Psychopath.*, vol. xiv, p. 227, Jan., 1934.) Davison, C.

The author describes a case of paresis, ataxia and intention tremor in a baboon. Histologically there were numerous small demyelinated plaques, consisting essentially of "gemästete" glia-cells scattered throughout the white matter of the cerebral hemispheres and optic tracts. The relation of these findings to those in multiple sclerosis, diffuse sclerosis, subacute combined degeneration and xanthomatosis is discussed. The author raises the question whether the demyelinated plaques in the baboon are analogous to those found in xanthomatosis, and if this is so he thinks there is some disturbance in lipoid metabolism to blame.

G. W. T. H. FLEMING.

Histological Changes in the Brain in Cases of Fatal Injury to the Head. V: Changes in the Nerve-Fibres. (*Arch. Neur. and Psychiat.*, vol. xxxi, p. 527, March, 1934.) Rand, C. W., and Courville, C. B.

The authors studied the changes in the axis-cylinders in cases of injury to the brain. They found interruption of nerve-fibres with consequent impairment of nervous function a common result of injury. This interruption resulted in the formation of end-bulbs on both the proximal and distal segments. Those on the proximal end of the distal segment generally had a more complex structure. Those on the distal end of the proximal segment, more intensely impregnated with silver and simpler in structure, are capable of maintaining their identity for months or years. These end-bulbs appear on fine fibres within two hours, and shortly thereafter on medium and large fibres. Those on the proximal end of the distal segment begin to be detached within two days and ultimately disappear. The distal segment undergoes granular fragmentary or vacuolar degeneration, ultimately leading to disappearance of the axis-cylinder.

G. W. T. H. FLEMING.

Nervous System in Deficiency Diseases. II: Lesions Produced in the Dog by Diets Lacking the Water-soluble Heat-stable Vitamin B₂ (G). (*Journ. Exper. Med.*, vol. lix, p. 21, 1933.) Zimmerman, H. M., and Burack, E.

Adult dogs, maintained on an artificial balanced ration adequate in all dietary essentials as far as is known, except water-soluble, heat-stable vitamin B₂ (G), developed, after a sufficient time, a slowly progressive disease characterized by loss of weight, persistent vomiting and diarrhoea and marked muscular weakness, which ended fatally in 200-300 days. The clinical picture is quite different from black tongue.

C. J. WEST (Chem. Abstr.).

The Cation and Chlorine Content of the Rabbit Brain. (*Jap. Journ. Med. Sci.*, II, *Biochem.*, vol. ii, p. 11, 1933.) Matsumoto, M.

In the grey matter the composition is: Calcium 7.7%, magnesium 14.6%, potassium 351.7%, sodium 131.9%, chlorine 181.9%, water 81.85% and nitrogen 1.95%. In the white matter the composition is: Calcium 6.6%, magnesium 16.1%, potassium 340.1%, sodium 121.7%, chlorine 165.4%, water 69.42% and nitrogen 2.07%. The white matter of full-grown rabbits contains more water than that of young rabbits, while the grey matter is richer in potassium and poorer in calcium.

B. S. LEVINE (Chem. Abstr.).

The Inorganic and Phosphagen Phosphorous Contents of the Brain. (*Jap. Journ. Med. Sci.*, II, *Biochem.*, vol. ii, p. 85, 1933.) Matsumoto, M.

Rabbits and albino rats were used in the determinations. The inorganic phosphate content is higher in the grey than in the white matter. Phosphagen is contained abundantly in the latter. The proportion of phosphagen phosphorus