Choline Esterase Content of the Spinal Cord. (*Klin. Wochenschr., vol. xvii, pp.* 98–9, 1938.) *Martini, E., and Torda, C.*

Choline esterase activity of the cervical region is about 80 per cent. that of the lumbar. After section of the cord between the seventh and eighth or eighth and ninth dorsal segments the activity of the lower segment is decreased below that of the cervical. After two to three weeks the activity returns to normal.

H. L. MASON (Chem. Abstr.).

Choline Esterase Activity of the Muscles after Section of the Spinal Cord and After Denervation. (*Klin. Wochenschr., vol. xvii, pp.* 97–8, 1938.) *Martini, E., and Torda, C.*

Interference with the function of the lumbar segment by section of the dorsal segment of the spinal cord decreased the choline esterase activity of the gastrocnemius muscle of the rat. When the autonomic activity of the lumbar segment was increased the choline esterase increased to higher than normal values. Choline esterase activity of muscles depends on the functions of the spinal cord. The same is true of the nervus ischiadicus. H. L. MASON (Chem. Abstr.).

Cholinesterase in Nerve Tissue. (*Compt. Rend. Soc. Biol., vol. cxxvii, pp.* 894–6, 1938.) *Nachmansohn, D.*

The fibres and ganglions of the abdominal nerve chain of the lobster have about twice the cholinesterase activity at 20° as the fibres and ganglions of the sympathetic chain of the dog have at 38°. In either case the ganglions contain about 2·5 times as much cholinesterase as the fibres (non-myelinated). The lobster ganglion can hydrolyse 20–30% of its weight of acetylcholine in 1 hour at 20°. A chicken cerebellum weighing about 0·5 grm. contains enough cholinesterase to hydrolyse 1,014 molecules of acetylcholine in one millisec. The probability that acetylcholine plays a part in the synapse mechanism is discussed.

L. E. GILSON (Chem. Abstr.).

Blood Potassium in Diseases of the Nervous System. (*Bull. Acad. Méd. Roumanie, vol. iv, pp.* 547–50, 1937.) *Urechia, C. I., Manta, N., Retezeanu, Mme., and Bumbascesco, M.*

Levels of blood potassium, ranging from 5 to 27 mgrm. per 100 c.c., in various diseases of the nervous system were shown. The majority of cases have a normal blood potassium, but in general paralysis there is an increase probably due to the destruction of red cells, which contain much potassium. Reduced blood potassium was found in cases of mitral disorder, in polyneuritis accompanied by anæmia, and in dementia præcox. DOROTHY W. ASHER (Chem. Abstr.).

Water and Salt Contents of the Brain and Liver of Insulinized Animals. (*Zeitschr. ges. Exptl. Med., vol. ciii, pp.* 264–9, 1938.) *Druey, J., and Delachaux, A.*

Analyses of 7 normal and 7 insulin-treated rabbits (10–20 units per kgrm.) for water, glycogen, sodium, potassium, calcium and magnesium showed no effect of the insulin on the brain and a small loss of liver water. Liver potassium increased and sodium fell. MILTON LEVY (Chem. Abstr.).

The Experimental Production of "Encephalomyelitis" by the Intravenous Administration of Coagulants. (*Trans. Amer. Neurol. Assoc., vol. lxiii, pp.* 85–8, 1937.) *Hoefer, P. F. A., Putnam, T. J., and Gray, M. G.*

Structural and functional disturbances of the nervous system similar to those of encephalomyelitis were produced by injection of coagulants, e.g., lung extract, homologous and heterologous serums, bacterial vaccines, fractions of serum protein, etc., into the circulation. Massive coagula were produced by large doses of substances such as Ribers and Schwentker's brain extract, known to cause foci of demyelination