

## 6. Pathology and Biochemistry.

*The Cholesterol Content of the Cerebro-spinal Fluid.* (*Arch. Psychiat.*, vol. cii, pp. 147-96, 1934; *Ber. ges. Physiol. exptl. Pharmakol.*, vol. lxxxiii, p. 380.)  
Holthaus, B., and Wichmann, B.

The cholesterol content was determined by a modification of the Bloor, Allen and Pelkan method for blood-serum, with a Pulfrich photometer. The Hauptmann saponin-hæmolysis reaction, the sugar content, the Kafka albumin relation, the NaCl content and the gold sol reaction were determined on the cerebro-spinal fluid of 383 patients. Cholesterol was always present, normal values in 56 patients ranging between 0.3 to 0.6 mgrm. %. With progressive paralysis, 39 patients showed 0.36 to 0.92 mgrm. %; 13 patients with fever showed 0.4-1.03 mgrm. %. No changes were observed in 4 cases of tabes dorsalis, and no significant changes in 6 patients with meningitis. Slight increases were observed in 28 of 56 epileptics. Decreased cholesterol was observed also in hydrocephalus. Increases were observed also in arterio-sclerosis, encephalitis, schizophrenia, manic-depression, myelitis and migraine. An increase in cholesterol was observed when definite increase in lipoids occurred in the nervous system or when there were changes in the blood-cerebro-spinal fluid volume. JAMES C. MUNCH (Chem. Abstr.).

*Newer Researches Regarding the Bromine Picture in the Blood of Patients with Psychosis.* (*Klin. Wochenschr.*, vol. xv, pp. 1832-3, 1936.) Meier, C. A., and Schlientz, W.

Br. determinations were made by the method of Liepert-Watzlawek. The blood is ashed with chromic acid in a closed system and the Br. titrated as bromate. The bloods of a large series of psychotic patients were found to contain 75-233 mgrm. with an average of 130 mgrm. % Br. No relation between the type of psychosis and Br. value was found. The higher values reported in the literature probably represent a previous Br. therapy. The table salt in Zurich contains half as much Br. as that in Vienna. This may explain the lower Br. values in patients who live in Zurich. W. MENDELSON (Chem. Abstr.).

*The Clinical Application of the Phosphatide-splitting Property of Serum from Normal and Psychotic Individuals.* (*Klin. Wochenschr.*, vol. xvi, pp. 59-60, 1937.) Freund, E., Lustig, B., and Heimann, M.

Mixtures of serum and brain emulsion were incubated for 24 hours at 37°. With normal serum the inorganic P increased from 0.1 to 0.95 mgrm. % (av. 0.38). With serum from patients with general paresis, epilepsy, paranoia and schizophrenia, in 60-66% of the cases, the increase in inorganic P was greater than with normal serum. The average increase was 1.71 mgrm. %.

W. MENDELSON (Chem. Abstr.).

*The Determination of Vitamin C Content in the Human Brain by Means of the Dental Test.* (*Klin. Wochenschr.*, vol. xvi, pp. 93-6, 1937.) Kalnins, Viktors.

Scurvy was induced in guinea-pigs by feeding a vitamin C-free diet. After administration of various amounts of ascorbic acid for 16 days, histologic examination of the teeth was made. In this way standards of healing were obtained. The effect of feeding brain emulsion as compared with ascorbic acid serves as the basis for this test. In 1 grm. adult and infant brain there was 1.15 and 0.5 mgrm. ascorbic acid respectively. W. MENDELSON (Chem. Abstr.).

*The Phospholipides of the Brain, Kidneys and Heart of White Rats in Experimental Hyperthyroidism.* (*Endocrinology*, vol. xxi, pp. 101-8, 1937.) Weil, Arthur.

When thyroid powder is fed to rats there is a decrease in body-weight and an increase in the weight of the kidneys and heart. There is a decrease in water, an increase of AcMe-sol. extracts in brain, kidneys and heart, an increase in alcoholic