

*The Total and Diffusible Calcium of Serum and the Calcium of Cerebro-spinal Fluid in Human Cases of Hypocalcæmia and Hypercalcæmia.* (Biochem. Journ., vol. xxvii, p. 1978, Dec., 1933.) Herbert, F. F. K.

In human cases of hypocalcæmia and hypercalcæmia, the calcium of the cerebro-spinal fluid remains constant in spite of very wide variations in serum-calcium. The cerebro-spinal fluid calcium cannot be taken as a measure of the diffusible calcium in serum. In hyperparathyroidism the diffusible calcium of the serum is greater than the cerebro-spinal fluid calcium; in tetany and in some cases of uræmia the diffusible calcium falls below the cerebro-spinal fluid calcium.

G. W. T. H. FLEMING.

*The Nervous Regulation of the Blood-Sugar Level: Decerebration Hyperglycæmia.* (Klin. Woch., vol. xii, p. 778, 1933.) MacLeod, J. J. R., and Donhoffner.

Prolonged anæsthesia with barbituric acid derivatives prevents piqure hyperglycæmia in fasting rabbits. During intravenous amytal anæsthesia and local anæsthesia, decerebration through the pons causes hyperglycæmia, associated with a decrease in muscle glycogen, insufficient, however, to explain the observed increase in blood-sugar. The blood lactic acid increases the liver glycogen and the gas metabolism is unaffected. Either bilateral adrenalectomy, vagotomy and atropine or atropine and ergotamine prevent decerebration hyperglycæmia in normally fed animals; in animals with liver glycogen of more than 5% the drugs alone do not suffice. Amytal and luminal also inhibit decerebration hyperglycæmia.

H. EAGLE (Chem. Abstr.).

*Insulin Hypoglycæmia Tests with Epileptics.* (Compt. Rend. Soc. Biol., vol. cxiv, p. 902, 1933.) Baudouin, A., Azerad, E., and Lavin, J.

The blood glucose of epileptics (17 cases) and the effects of insulin were practically the same as in normal persons.

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

*The Influence of Emotional Excitement upon the Chemical Composition of the Blood.* (Arch. Soc. Biol. [U.S.S.R.], vol. xxxii, p. 502, 1932.) Obrastzov, G. D., Minker-Bogdanova, E. T., and Kalinnikova, M. N.

In emotional states in rabbits (fear, etc.), in addition to an increased sugar level, there were much greater variations of amylase content and a lower fat level than in normal quiescent states. In psychoneurotic children in emotional states, increased blood potassium and calcium were observed.

W. A. PERLZWEIG (Chem. Abstr.).

*The Leucocyte Formula in Affective Disorders [La formula leucocitaria nelle distimie].* (Riv. di Pat. Nerv. e Ment., vol. xlii, p. 305, Sept.-Oct., 1933.) Rizzatti, E., and Maninengo, V.

The authors studied 100 cases of manic-depressive insanity, acute or chronic, elated or depressed, and including 14 cases of involuntional melancholia.

They found a neutropenia in 75% of cases, a lymphocytosis above 30% in about 80% of cases, and a monocytosis in 18%. The eosinophils were mostly within normal limits. The Arneht weighted mean (taking normal as between 2.60 and 2.80) was left-handed in 20%, normal in 35%, and right-handed in 45%. The nuclear inversion of Velez was only present in 5%, compared with 50% in schizophrenia. There was no difference between acute and chronic cases, or between mania or melancholia. It is likely that this lymphoid tendency represents some constitutional disturbance of the endocrine system.

G. W. T. H. FLEMING.

*Blood Studies in Schizophrenia [Ricerca ematologica nelle schizofrenie].* (Arch. Gen. di Neur. Psich. e Psico, vol. xv, p. 20, Jan., 1934.) Jedlowski, P.

The author studied 171 cases of schizophrenia. In a large proportion of cases he found a marked lymphocytosis and monocytosis and a more or less marked

neutropenia. He takes, however, as his normal limits for lymphocytes 18–22%—a very low figure. The eosinophils were increased in about 25% of cases, and decreased in about 20%. The basophils were normal in more than half the cases, decreased in about 36%. Myelocytes were scarce. The Arneth count was normal in only 30 cases out of the 171, was deviated to the right in 20, and to the left in 71%. The Schilling index behaved in a similar manner. The nuclear inversion of Velez (the ratio of nuclei with 3 lobes to those with 2, which is normally greater than unity) was present in 63% of cases. The blood changes were more marked in catatonia than in either hebephrenia or paranoid dementia præcox. In the latter disorder the blood changes become less marked as the disorder becomes more chronic.

G. W. T. H. FLEMING.

*Investigation of the Reticulo-Endothelial System in Schizophrenia [Esplorazione del sistema reticulo-endoteliale nella Schizofrenia]. (Riv. Sper. di Freniat., vol. lvii, p. 433, June, 1933.) Canziani, G.*

The author applied the Congo red method to 100 cases of schizophrenia. The normal "index of absorption" varies between 50–70. In severe toxic and infective conditions from 80–100% is recovered from the blood. The author found a normal index in 34% of cases, and an increased index in 66%. He compares his results with those of Meyer and Levi, both of whom found a much greater percentage between 70–100. He concludes that there is in schizophrenia a severe impairment of the reticulo-endothelial system.

G. W. T. H. FLEMING.

*Intestinal Factors in Dementia Præcox [Componenti enterogene della demenza precoce]. (Riv. di Pat. Nerv. e Ment., vol. xli, p. 483, May–June, 1933.) Buscatino, V. M.*

From a summary of 54 cases in the literature the author finds that enteritis was present as a factor in 53% of cases, gastritis in 50%, and colitis in 42%. In some cases there were zones of intense sclerosis of the mucosa, submucosa or sub-peritoneal coats.

G. W. T. H. FLEMING.

*The Virus of Tuberculosis in Dementia Præcox. (L'Encéphale, vol. xxviii, p. 561, Sept.–Oct., 1933.) Claude, H., Coste, F., Valtis, J., and van Deinse, F.*

Having mentioned the considerable work done previously on the connection between tuberculosis and schizophrenia, the theory is put forward that the "intoxication" with the virus of tubercle may be responsible for psychic and psychomotor disorders along the lines of catatonia produced by bulbocapnine and other substances.

The lack of uniformity in the results of other workers in this field is regarded as being due to a failure to perceive that the schizophrenic reactions have no uniform ætiology, and that the hebephreno-catatonic type, more or less toxic in origin, differs in this respect from the schizoid states which are due in the main to psychic traumata.

Some space is given to the discussion of the findings of other workers, and to the discovery, or otherwise, of tuberculous lesions at autopsy.

It is stated that using suitable cases of the hebephreno-catatonic type, and investigating the serological status with the technique of Besredka, it has been established that tuberculosis and dementia præcox form a pair, but not that there is a bond of causality between them.

About 30 cases were examined. Serum and cerebro-spinal fluid were injected into guinea-pigs. Three pigs were used for each case; one was used as a control, and two were treated with an acetone extract of the bacillus.

Twelve cases yielded positive results. These are formulated as follows: The *Bacillus tuberculosis* was present in blood or cerebro-spinal fluid of 12 out of 19