

*The Cerebro-spinal Fluid in Schizophrenia* [*El líquido céfallo-raquídeo en la esquizofrenia*]. (*Arch. de Neurobiol.*, vol. xiii, p. 743, 1933.) Arias, B. R., Irazoqui, E., and Catasús, J. M.

In their examinations of the cerebro-spinal fluids of schizophrenics, the authors found that 75% showed abnormalities, which were small, but sufficient for diagnostic purposes. The alteration usually consists of a slight albuminosis, without lymphocytosis and rarely with globulinosis, which is reflected in the behaviour of the colloidal reactions. Pathological fluids are found much more frequently in old than in recent cases of schizophrenia, and somewhat more often in the simple and hebephrenic than in the paranoid forms.

M. HAMBLIN SMITH.

*Determination of Chlorine, Calcium, Potassium and Sodium in Small Quantities of Cerebro-spinal Fluid.* (*Med. Doswiadoczalna i Spoleczna*, vol. xviii, pp. 80-90, 1934.) Juev, J.

Determination of chlorine in 0.5 or 1 c.c. of cerebro-spinal fluid by the methods of Van Slyke and Mohr are in agreement if the albumen present does not exceed 0.25% ; potassium, when determined by Kramer and Tisdall's method, calcium, when determined by the method of Kramer and Tisdall or by the method of Woard, and sodium, when determined by that of Kramer, Gittleman and Rourke, gave accurate results. The following amounts were found in the spinal fluid of normal rabbits: Chlorine (calculated as sodium chloride) 774, calcium 5.8, potassium 13 and sodium 343 mgrm.%. The importance of control tests is stressed.

C. T. I. (Chem. Abstr.).

*Lactic Acid in the Cerebro-spinal Fluid in Meningitis.* (*Arch. Kinderheilk.*, vol. ci, pp. 108-117, 1934.) Geldrich, J.

The lactic acid concentrations in blood and spinal fluid were determined by the Embden titrimetric method (method described). In meningitis the spinal fluid lactic acid increased as the sugar decreased, and terminally often reached a concentration much higher than that in the blood, which usually remained constant throughout.

E. M. HUMPHREYS (Chem. Abstr.).

*Chlorides in the Cerebro-spinal Fluid during Nervous Diseases.* (*J. Biol. Méd. Exptl.* [U.S.S.R.], vol. xiv, p. 64, 1930.) Stefer, D. G.

The chloride contents of the blood and cerebro-spinal fluid were determined in 174 patients. A decrease in the chloride content of the spinal fluid was accompanied by pathological processes in the meninges, the greatest decrease occurring during bacterial meningitis (especially tubercular). During acute meningitis a decrease in the chloride content of the fluid below .67 must be considered a grave symptom. In syphilitic diseases of the central nervous system the decrease in the chloride content of the spinal fluid was parallel to the degree of infection of the meninges. The decrease was due to the adsorption of the chlorides by the albumens, which penetrated into the cerebro-spinal fluid when the hemato-encephalic barrier was disturbed. The return of the chloride content to the normal progressed parallel with the decrease in the albumen reaction.

G. G. (Chem. Abstr.).

*The Amylolytic Value of the Cerebro-spinal Fluid and the Blood in Non-syphilitic Psychoses* [*Ricerche sul valore amilolitico del liquor e del sangue in psicosi non luetiche*]. (*Riv. di Freniat.*, vol. lviii, p. 287, June, 1934.) Imber, I.

The writer studied, by means of the Wohlgenuth method, the amylase content of the spinal fluid and blood-serum of 13 schizophrenics, 8 post-encephalitics, 10 cases of mania, 5 melancholics, 10 epileptics and 8 mental defectives. In no case was a reading of 1.3 diastatic units at once or 2 units at the end of one hour exceeded. The lowest values down to complete absence of amylase were found in epileptics, some mental defectives, and in the hebephreno-catatonic group of the