The Reaction of Spinal Fluid in Meningeal Infections. (Boll. soc. ital. biol. sper., vol. ix, p. 896, 1934.) Ceruti and Maestri.

There was a decrease in the pH (determined by quinhydrone electrode) of the spinal fluid from 22 cases of meningitis caused by the diplococcus, staphylococcus, tubercle bacilli and by uræmic coma. A return to the normal pH of the fluid coincided in most cases with an improvement of the clinical picture.

P. Masucci (Chem. Abstr.).

Magnesium Content of the Cerebro-spinal Fluid: Its Relation to Blood Magnesium. (Rev. soc. argentina biol., vol. ix, p. 321, 1933.) Bonorino Udaondo, C., Schteingart, M., and Gaibrois, R.

In the 18 cases studied the spinal fluid magnesium ranged from 1.6 to 2.9 mgrm.% It was the same, or very slightly higher, as in the blood-serum of the same individual. No departure from the normal range was found in cases of chronic affections of the central nervous system.

L. E. GILSON.

Presence of Imidazoles in Certain Spinal Fluids. (Compt. Rend. Soc. Biol., vol. cxvii, p. 576, 1934.) Loeper, M., Perrault, M., Bïoy, E., and Lesure, A.

Normal spinal fluid contains traces of imidazoles or none, but in pregnancy and some nervous disorders the quantity increases. L. E. Gilson (Chem. Abstr.).

The Blood-Cerebro-spiral Fluid Barrier in Mental Disorders. (Amer. Journ. Psychiat., vol. xci, p. 1033, March, 1935.) Rothschild, D., and Hamberg, C. N.

The distribution of calcium between blood and cerebro-spinal fluid was investigated in 400 cases of mental disorder. The results were suggestive of a tendency towards decreased permeability of the barrier in schizophrenia and increased permeability in untreated cases of general paresis. There was a general correlation between the distribution ratios of calcium and bromide in schizophrenia, affective psychoses and untreated neurosyphilis. Low calcium rates tended to occur in cases presenting increased amounts of protein in the cerebro-spinal fluid.

M. HAMBLIN SMITH.

Plasma Proteins and Plasma-Fluid Chloride Ratio: The Nature of Spinal Fluid. (Boll. soc. ital. biol. sper., vol. ix, p. 966, 1934.) Disertori, B.

Plasma protein, spinal fluid protein, plasma chlorides and spinal fluid chlorides were determined on ten pathological cases. The amount of fluid proteins was practically the same in all. The fluid protein cannot, therefore, play any part in the fluid chlorides/plasma chlorides ratio. The shifting of the chloride ratio and the variations in the plasma protein are independent factors, and thus contrary to the requirements of the Donnan equilibrium. Even as regards the passage of the chlorine ion, the formation of spinal fluid must be looked upon as a complex biological phenomenon in which factors of secretion and permeability intervene.

P. Masucci (Chem. Abstr.).

Creatine Equilibrium and Glycine in Progressive Muscular Atrophy. (Minerva Med., vol. i, pp. 224-31, 1935.) Scaglioni, C.

One case was thoroughly studied before, during and after glycine therapy. Before treatment the creatininuria was about one-third lower than normal, creatinuria was constituted at 0.22 gr., the creatinine coefficiency was 10.5% lower than normal, and there was only a 5–10% tolerance for exogenous creatine. During 50 days of therapy, creatinine increased from 1.03 gr. to 1.60 gr., creatine increased at first and then decreased to 15% lower than normal, the creatinine coefficient increased and the tolerance for exogenous creatine was unchanged. In the 20 days after the therapy, creatinine rapidly decreased, then returned to the maximum values obtained during treatment, creatine diminished to a trace, the creatinine coefficient returned almost to normal and the exogenous creatine tolerance was greatly increased.

Helen Lee Gruehl (Chem. Abstr.).