

the passage in the opposite direction. The choroid plexuses, ependyma, neuroglia, cerebro-spinal vessels and leptomeninges are the main anatomical constituents of the "barrier." There is reliable evidence that the barrier acts as a dialysing membrane. Any functional disorder resulting in either increase or decrease of the permeability has an ill effect upon the nervous system. The problem is of importance from the point of view of intra-spinal treatment, and of measures aiming to increase the permeability. Among the latter, pyretotherapy is recommended. But the problem requires further investigation.

M. HAMBLIN SMITH.

*The Permeability of the Hæmato-Encephalic Barrier as Determined by the Bromide Method.* (*Arch. of Neur. and Psychiat.*, October, 1930.) Gordy, S. T., and Smith, S. M.

The authors examined 183 patients at the Philadelphia Hospital for Mental Disease by Walter's bromide method. In general paralysis the majority of cases showed a marked increase in meningeal permeability. In dementia præcox the majority of patients showed a normal figure, about 24% showed increased permeability and 7% diminished permeability. In cases of chronic alcoholic psychosis there was a tendency towards increased permeability. A similar tendency is shown in some degree in psychoses with cerebral arterio-sclerosis. Half of the cases of manic-depressive psychosis showed increased permeability. In post-encephalitic cases and in senile psychosis there were no abnormal tendencies.

G. W. T. H. FLEMING.

*Barrier between the Blood and Cerebro-spinal Fluid. III: Distribution Ratio of Bromides in Schizophrenias.* (*Arch. of Neur. and Psychiat.*, August, 1930.) Malamud, W., and Rothschild, D.

The authors investigated 210 cases. They found that in schizophrenia uncomplicated by somatic diseases, 60% of the cases showed ratios above 3.2 (up to 4.3), 38% ratios between 2.8 and 3.2, and 2% below 2.8. Active tuberculosis, cerebral arterio-sclerosis, acute infections and reaction to typhoid inoculation tended to increase the passage of bromides into the spinal fluid (*i.e.*, to decrease the ratio). There was no definite relationship between the distribution ratio and the type of schizophrenia as usually described. A large proportion of the cases with ratios between 2.8 and 3.2 ran acute courses with remissions. The few cases with a ratio below 2.8 showed passive decompensating types of schizophrenic processes.

G. W. T. H. FLEMING.

*Galactose Tolerance in Dementia Præcox.* (*Arch. of Neur. and Psychiat.*, September, 1930.) Sleeper, F. H., and Hoskins, R. G.

The authors determined the galactose tolerance in 135 male cases of dementia præcox. They found some variability in those

cases in which multiple determinations were made. In the series as a whole there was a downward trend of the galactose tolerance, averaging approximately 15%. In 8% the tolerance was above normal, and in 58% it was below normal. There was no relationship between weight, age, creatinine output, protein katabolism or initial blood-sugar level and galactose tolerance. There was some evidence of a decrease of tolerance in chronic cases.

G. W. T. H. FLEMING.

*Deficiency of Catalytic Iron in the Brain in Schizophrenia.* (*Arch. of Neur. and Psychiat.*, August, 1930.) *Freeman, W.*

The author examined the brains of a variety of psychotics histochemically, and at the same time estimated the amount of iron present in the various groups. The average iron content is slightly lower in the schizoid group than in the paranoid and cycloid group. There was both histochemically and quantitatively a deficiency of iron in the cortical ganglion cells. The lack of this catalytic agent, so essential to the utilization of oxygen by these cells, may underlie certain features in the symptomatology of this psychosis.

G. W. T. H. FLEMING.

*The Problem of the Anatomy of Schizophrenia.* (*Journ. of Nerv. and Ment. Dis.*, September, 1930.) *Spielmeyer, W.*

Spielmeyer has discontinued work on this subject for the present. He points out that there are three main sources of error: Firstly, that the changes so often found are the result of bodily disease. The small nerve-cell-free zones and lighter strands in the cortex occur in normal individuals, *i.e.*, in cases of accidental death, in soldiers who fell in the war, and in executed individuals. Secondly, he has also found copious fatty substances in glial cells and vessel walls in young healthy subjects. He does not consider this finding pathological. Thirdly, he has found fresh necrobiotic areas in a variety of conditions—intoxications, infections, etc.—and he does not consider these pathognomonic of schizophrenia. The positive findings, however, the author considers to be a cellular loss in the third layer of the cortex as well as the deeper layers, sometimes with an enormous accumulation of fat. In the acute stages there are active destructive phenomena in nerve-tissue with progressive and regressive changes in the glia, and often abundant destructive products.

G. W. T. H. FLEMING.

*Recent Investigations into the Ætiology and Pathology of Confusional Insanity and Dementia Præcox.* (*L'Encéphale*, January, 1930.) *Buscaino, V. M.*

Buscaino published works on this subject in 1920 and 1924. In the brains of cases of dementia præcox he claims to have discovered alterations (rarefaction) in the texture of the brain substance, especially in the white matter and in the basal ganglia. It would appear that these areas of "degeneration" are level or flattened, and not superimposed.