

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.

The symptoms of dementia præcox, especially the catatonic manifestations, are believed to be due to these lesions. The author has demonstrated that when the lesions were situated in extra-cortical and extra-pyramidal areas the symptoms of catatonia were more marked.

Attention is also again drawn to the author's "black reaction," produced by heating the urine with silver nitrate, and due to the presence of abnormal substances (? amines). The reaction is said to be positive in all forms of confusional insanity, and in about 80% of early cases of dementia præcox, especially of the catatonic type.

The author holds the opinion that a particular micro-organism forms toxins in the lower intestine, and as a consequence of bowel lesions, or an abnormal permeability of the mucosa, these toxins eventually have a damaging effect on a nervous system already predisposed, and cause the cerebral lesions described.

J. R. BEITH ROBB.

*The Boltz (A.A.S.) Test in Cerebro-spinal Fluid. (Amer. Journ. Psychiat., September, 1930.) Walker, B. S., and Sleeper, F. H.*

The reaction is not specifically diagnostic for neurosyphilis. As a means for rapid estimation of the protein in the spinal fluid it is of definite value. It is very doubtful if the test can ever be made really quantitative. But where there is no time or equipment for the more elaborate methods, it supplies a convenient approximation.

M. HAMBLIN SMITH.

*The Takata-Ara Colloidal Test with Spinal Fluid. (Arch. of Neur. and Psychiat., October, 1930.) Karnosh, L. J., and King, H. H.*

The authors conclude that the test is not highly specific. It is positive in about 82% of cases of metasyphilis. It is frequently positive in non-syphilitic organic conditions, such as cerebral arterio-sclerosis, brain trauma and tumour.

G. W. T. H. FLEMING.

*Hyaline Degeneration in Dementia Paralytica. (Arch. of Neur. and Psychiat., July, 1930.) Wolf, A.*

The author presents a case of general paralysis, which at autopsy showed a translucent area of almost cartilaginous hardness in the upper portion of the left precentral gyrus. Similar smaller areas were found in various regions of the brain-stem, both occipital lobes, second left temporal gyrus, both gyri recti and the thalamus. The author concludes that there is a disturbance of protein metabolism in dementia paralytica, and that diseased nervous tissues contain proteolytic ferments. During the deposition of hyaline material, the vessel-walls form the first barrier and are the first site of deposition. After breaking down of the vascular defence, the second defence mechanism is a ring of inflammation and reaction of macroglia. The nervous and supporting elements are gradually destroyed by the pressure of the hyaline, which is partly absorbed,