In the substantia grisea the cells were in all stages of chromatolysis; neuronophagia was common; many cells were seen in an advanced stage of degeneration and dissolution. In the control brains the percentage of normal cells was 96, in the psychotic brains from 9–33. The amount of cell loss in this area ranged from 38% to 68%, average 52%.

In the nucleus tuberis lateralis similar changes took place. The percentage of normal cells in the 6 control brains varied from 66–96%, average 82%. In the psychotic cases the number varied from 3–52%. The cell loss was less severe than in the substantia grisea, the average being about 25%. The nucleus tuberomamillaris which is degenerated in all cases of epilepsy was unaffected in the psychoses examined. There was no relation between the type of psychosis and the damage done. The changes were not necessarily due to arterio-sclerosis, which was absent in four cases. G. W. T. H. FLEMING.

Chemical Changes in the Epileptic Syndrome. (*Amer. Journ. Psychiat., vol. xcii, p. 75, July,* 1935.) *Hopkins, H.*

This paper deals with nocturnal and diurnal rhythm in blood chemistry. The quality of these changes may be correlated with the clinical observation of increased susceptibility to seizures during sleep, especially after midnight. There is evidence for a shift of the blood and urinary titre towards the alkaline side during the early morning hours, as well as rising intracranial pressure and brain volume during sleep. The cholesterol content of the blood falls consistently during sleep, reaching minimal values at 3 a.m. It may be that each of these changes is related to the precipitation of seizures in susceptible persons. The acid-base, water-shifting and ionic blood changes of the author's experiments are of the type to encourage the development of seizures during the latter half of the period of sleep. These rhythmic changes occur in the normal as well as in the epileptic subject, and may be regarded as the normal rhythm for blood chemistry. M. HAMBLIN SMITH.

The Blood Glutathione (GSH) Level in Mental Diseases. (*Amer. Journ. Psychiat., vol. xci, p. 1387, May,* 1935.) *Brice, A. T.*

There appears to be a statistically significant difference in the GSH level between groups of mental patients and adequate individuals. This difference is greatest in catatonic dementia præcox. It is also marked in hebephrenic and paranoid præcox and in general paresis. It is less marked, but still significant in manic-depressive psychosis. In epilepsy it was not significant, but the number of cases was small. M. HAMBLIN SMITH.

The Relationship between Various Emotional Disturbances and the Sugar Content of the Blood. (*Amer. Journ. Psychiat., vol. xcii, p. 115, July,* 1935.) *Gildea, E. F., Mailhouse, V. L., and Morris, D. P.*

Severe emotional disturbances in people free from mental disease are accompanied by a hyperglycæmia. Slight emotional disturbances are rarely associated with a hyperglycæmia. Severe disturbances in patients with mental disorders, even when they appear to be as acute as those in the normal group, are not accompanied by a hyperglycæmia. The blood sugar content in patients with pathological emotional states is sufficiently different from that found in normal persons under acute emotional stress to indicate the presence of some qualitative difference in metabolic processes. M. HAMBLIN SMITH.

The Tone of the Autonomic Nervous System in the Puerperal State [El tono del sistema neurovegetativo en el estado puerperal]. (*La Semana Méd., vol. xlii, p. 1553, May* 30, 1935.) *Pérez, M. L., and Rosenvasser, J.*

The authors' investigations lead them to the following conclusions: In pregnancy there is hyperexcitability of the whole of this system, both sympathetic and parasympathetic. In pregnancy the tone is, in general, maintained within normal limits, although with a slight tendency to sympathetic and vagal hypertonia.

During the puerperium the hyperexcitability of the sympathetic persists, there is vagal hypoexcitability and the tone of the autonomic nervous system is diminished.
M. HAMBLIN SMITH.

Juvenile Dementia Paralytica. XII : Gross and Microscopic Pathology. (*Arch. of Pathol., vol. xix, p.* 316, *March,* 1935.) *Menninger, W. C.*

The characteristic macroscopic changes in juvenile dementia paralytica include a generalized atrophy, often hypoplasia of the brain, a marked leptomeningitic reaction, frequent hydrocephalus, and extensive ependymitis granulosa ; frequent cerebellar atrophy. Because of proliferation of neuroglia both the cerebrum and cerebellum are usually very firm in consistency.

Microscopically there is a generalized round-cell infiltration, an extensive proliferation of neuroglia and microglia, an increase in vascularity with proliferative changes of the elements of the vessel wall, a reduction in the number of nerve-cells in the cortex and changes in the nerve-fibres. The frequent finding of bi-nucleated Purkinjë cells in the cerebellum is characteristic.

In a small percentage of cases spirochætes can be demonstrated in the cortex, basal ganglia and cerebellum. G. W. T. H. FLEMING.

The Peculiar Cells in Pick's Disease. (*Arch. of Neur. and Psychiat., vol. xxxiv, p.* 508, *Sept.,* 1935.) *Williams, H. W.*

The three types of cell described in Pick's disease are not dependent on the senium or on specific ætiological agents for their development. A factor in their pathogenesis is axonal alteration which is of recent development and located in the vicinity of the cell of origin. There appears to be a close parallel between Pick's cells and axonal chromatolysis. Type II cells were more prominent in the less atrophic areas in Pick's disease and type I in the more atrophic region.

The term " Pick's cells " should be limited to those two types. Type III is rare and is not found in association with I and II, and resembles the early forms of Alzheimer's fibrillary changes. G. W. T. H. FLEMING.

The Chemistry of the Brain in the Mental Defective. (*Journ. of Neur. and Psychopathol., vol. xv, p.* 193, *Jan.,* 1935.) *Ashby, W. R., and Glynn, A.*

The grey matter of the frontal lobe from 62 mental defective and 9 normal adults was analysed chemically. The water content showed a significant correlation with mental age, the normal brains being drier than those of defectives. The myelin content and the lipoids showed no change with mental age. The protein phosphorus showed a significant correlation with mental age, the defective's brains being richer in protein phosphorus than those of normal individuals. This latter may be explained by the presence of more immature nerve-cells lacking in cytoplasm or by an excess of neuroglia. G. W. T. H. FLEMING.

The Reliability of the pH of Human Mixed Saliva as an Indicator of Physiological Changes. (*Amer. Journ. Psychol., vol. xlvii, p.* 222, *April,* 1935.) *Baker, K. H., and Eye, M. G.*

Noise, problem-solving and exercise all tend to bring about a decrease in the salivary pH. A positive correlation between salivary pH changes and blood pH changes after exercise was observed. There was a negative correlation between pH changes in the saliva and blood after moderate anoxæmia. Carbon dioxide is the primary factor in salivary pH changes, but there is a lack of correspondence between pH changes and pulmonary ventilation. G. W. T. H. FLEMING.

The Share of the Basal Ganglia in Epilepsy [*La participación de los ganglios centrales en la epilepsia*]. (*La Semana Méd., vol. xlii, p.* 1433, *May* 16, 1935.) *Hanón, J. L.*

When we consider cerebral physiology, we are quickly forced to reject the hypothetical theories of localization—a pernicious influence to which is due the lack of