

provides visual proof of the atrophies, present mainly in the frontoparietal area. Dehydration offers a means of improving the mental condition, both in adults and in children.

M. HAMBLIN SMITH.

#### 4. Pathology.

*The Effect of Dehydration on Parotid Secretion.* (*Amer. Journ. Psychiat.*, October, 1930.) Winsor, A. L.

The beneficial effect of dehydration in preventing epileptic seizures in some cases studied suggested the need for an investigation of the influence of a low-water balance on mental behaviour. A method for determining the state of liquid exchange through a quantitative analysis of parotid secretion under different exciting situations was presented, and the normal progress of dehydration when the intake of fluid was materially reduced over a period of 70 hours was charted.

A. WOHLGEMUTH.

*"Genuine Epilepsy": Studies of the Microscopic Changes in the Capillary System as a Probable Ætiological Factor.* (*Journ. of Nerve and Ment. Dis.*, November, 1930.) Alkon, D. M.

The author considers that brain trauma with capillary hæmorrhages sustained during birth is in many instances sufficient to give rise to a metabolic imbalance in susceptible individuals and thus lead up to the convulsive state.

G. W. T. H. FLEMING.

*Basal Metabolic Rate in Untreated and Treated Patients with Epilepsy.* (*Arch. of Neur. and Psychiat.*, December, 1930.) Notkin, J.

In a group of 50 untreated epileptics, Notkin found that the basal metabolic rate was normal in a high percentage in both sexes. The group with a rate below -10 was smaller than some other workers have found. There was a higher percentage of below -10 in the female group than in the male group. There was no correlation between the age and the basal metabolic rate. The basal metabolic rate in a group of 16 epileptics treated with luminal showed a considerable decrease in the percentage of normal readings, and a three-fold increase of the percentage of readings below -10. Luminal thus definitely decreases the basal metabolism. The basal metabolic rate in a group of patients treated with bromide showed similar changes.

G. W. T. H. FLEMING.

*Studies in Epilepsy. XI. The Calcium Content of the Blood and of the Spinal Fluid.* (*Arch. of Neur. and Psychiat.*, December, 1930.) Lennox, W. G., and Allen, M.B.

The authors investigated the serum and spinal fluid calcium of 77 unselected patients subject to recurring convulsions. Average

concentrations and average spinal fluid—serum ratios were within normal limits. There was an abnormally wide distribution of values, with a special tendency towards low spinal fluid measurements. In one-eighth of the patients the ratio of spinal fluid calcium to serum calcium was less than 45%. Only one of the patients had clinical tetany.

G. W. T. H. FLEMING.

*Further Notes on Examination of Cerebro-spinal Fluid by Ultra-Violet Light.* (*Journ. of Neur. and Psychopath.*, October, 1930.)  
Skinner, E. F.

The author made a spectroscopic examination of the spinal fluid, and found in meningitis a selective absorption with an interval between wave-lengths 3051 and 2764. The absorption appears to depend on some physical factor at present unknown. Possibly the colloidal reactions and the spectrograms are influenced by similar though not identical variations in the surface changes of particles of colloid.

G. W. T. H. FLEMING.

*Further Experimental Work on Bacterially-produced Nervous Tissue Lesions.* (*Journ. of Neur. and Psychopath.*, October, 1930.)  
Orr, D.

The author experimented on rabbits, introducing bacteria into the general circulation and then examining the brain. He found varying degrees of coagulation necrosis in the cortical nerve-cells. The morbid changes affected all the outer layers as far as the ganglionic layer (V). The cornu ammonis and fornix showed ischæmic softenings. All these areas are supplied by vessels derived from the pia-arachnoid. The author thinks that these vessels in the fornix and cornu ammonis are terminal arteries.

G. W. T. H. FLEMING.

*Studies of the Biochemistry of the Brain Blood by Internal Jugular Puncture.* (*Amer. Journ. Psychiat.*, November, 1930.) Myerson, A., and Halloran, R. D.

The study was combined with puncture of the carotid artery, and of the brachial artery and basilic vein. The technique is quite safe. The nitrogen, phosphate, calcium and chloride contents of the blood are the same in all four vessels. Brain consumption of sugar is greater than arm consumption of sugar. Consumption of oxygen and production of CO<sub>2</sub> show no significant difference in the brain and in the arm.

M. HAMBLIN SMITH.

*A Pathologic Contribution to the Concept of Neurosomatic Deterioration in Epilepsy, with Record of Two Cases.* (*Amer. Journ. Psychiat.*, January, 1931.) Hodskins, M. B., and Yakovlev, P. I.

In both cases there was evidence of a primary vascular cerebral lesion as the starting-point of a chronic degenerative process, affecting principally the frontal cortex and the basal ganglia. This