

subjected to the treatment showed no alteration in their condition. In the 6 Parkinsonians the essential neurological state was unrelieved, though some amelioration of the general condition was noted. S. M. COLEMAN.

*Therapeutic Euthanasia [Eutanasia terepéutica].* (*La Semana Méd.*, vol. xli, p. 391, Feb. 1, 1934.) Moss, J. J.

According to the author there is a growing demand for the legalization of therapeutic euthanasia in cases of painful and incurable maladies. Three types of case may be distinguished: (1) The patient is aware of his condition and of the impossibility of his cure, and demands death. Society should allow the wish of the patient to be carried into effect. (2) The patient is incurable, but is incapable of appreciating his condition or of desiring death. Society, with the consent of the patient's family, should appoint a medico-legal commission to carry out such examinations as may be necessary in order to decide upon the desirability of euthanasia. (3) The patient is incurable, but refuses euthanasia. In this case some authorities contend that euthanasia should, after minute medical examination, be allowed, even against the wish of the patient's family. The whole question is complicated by the fact that therapeutic euthanasia might be liable to abuse, but this danger should not prevent us from studying the question without prejudice.

M. HAMBLIN SMITH.

## 6. Pathology and Biochemistry.

*Morphological Metabolism of Neutral Fats in the Central Nervous System During Development of the Embryo.* (*Compt. Rend. Soc. Biol.*, vol. cxiv, p. 578, 1933.) Hadjioloff, A., and Ouzounoff, G.

In the chick embryo neutral fats were detected in the central nervous system from the fifth to about the fifteenth day; they then disappeared.

L. E. GILSON (Chem. Abstr.).

*Nerve Catalase.* (*Amer. Journ. Physiol.*, vol. cvi, p. 404, 1933.) Schmitt, F. O., and Skow, R. K.

Frog nerve contains relatively little catalase. Nerve tissue contains a thermostable substance that actively catalyses the oxidation of unsaturated fatty acids. It is unlikely that the oxidation catalyst is the residue of catalase alone.

J. F. LYMAN (Chem. Abstr.).

*The Effect of Vitamin B<sub>1</sub> upon the Respiratory Quotient of Brain Tissue.* (*Biochem. Journ.*, vol. xxvii, p. 1927, Dec., 1933.) Sinclair, H. Mc.

The respiration of brain tissue from normal, rice-fed and polyneuritic pigeons was studied in the presence of lactate, buffered with either phosphate or bicarbonate. The respiratory quotient of the tissue from polyneuritic pigeons is low, and is raised nearly to the normal value by the addition *in vitro* of minute amounts of crystalline vitamin B<sub>1</sub>. This low value is independent of inanition, since the addition of vitamin does not influence the respiratory quotient of tissue from normal pigeons, and hardly influences the quotient of tissue from pigeons fed on polished rice but not showing symptoms.

G. W. T. H. FLEMING.

*The Influence of Nervous Stimulation on Absorption from the Intestine; the Humoral Theory of Nervous Action.* (*Amer. Journ. Physiol.*, 1933, cvi, p. 283.) Gellhorn, E., and Northup, D.

In a frog preparation in which the intestine is perfused with isotonic glucose, and the blood-vessels supply the intestine perfused with Ringer solution, and the perfusion rate is kept constant, the absorption of glucose is regularly altered

by stimulation of the autonomic nerves. Similarly glucose absorption is altered by the administration of acetyl-choline and adrenaline.

J. F. LYMAN (Chem. Abstr.).

*The Appearance of an Acetyl Choline-like Substance in the Coronary Venous Blood of Warm-blooded Animals upon Stimulation of the Vagus Nerves.* (Arch. Exper. Path. Pharmacol., vol. clxxii, p. 170, 1933.) Feldberg, W., and Krayer, O.

After electrical stimulation of the vagus the substance can be demonstrated in the blood of the coronary vein in dogs and cats, provided that the acetyl choline destroying activity of normal blood is previously inhibited by the intravenous injection of physostigmine. The acetyl choline activity disappears within a few minutes after the stimulation, and is believed to be due to acetyl choline as such.

H. EAGLE (Chem. Abstr.).

*Parasitosis of the Central Nervous System [Parasitosis del Sistema Nervioso Central].* (Arch. de Neurobiol., vol. xii, p. 821, Nov.-Dec., 1932.) Albo, W. L.

This paper contains what appears to be an exhaustive list of all parasites, animal and vegetable, which have been recorded as affecting the central nervous system. Brief clinical descriptions are provided. The occurrence of these various parasites varies much in frequency, and some are only found in tropical countries. The *Spirocheta pallida* is not included, on account of the large amount of work which has already been done in respect to that organism.

M. HAMBLIN SMITH.

*Histopathology of True Epilepsy [Histopatologia de la epilepsia genuina].* (Arch. de Neurobiol., vol. xiii, p. 515, May-June, 1934.) Prados y Such, M.

After a critical review of the work which has been done on this subject, the author concludes that there is no anatomical basis sufficient to make us suspect that in idiopathic epilepsy there exists a cerebral process, with morphological alterations, which can be regarded as the cause of the disease. In the present state of our knowledge we cannot speak of a pathological anatomy of true epilepsy, but only of an anatomy of the epileptic fit.

M. HAMBLIN SMITH.

*Experimental Toxic Approach to Mental Diseases, Parts I and II.* (Psychiat. Quart., vols. vi and vii, pp. 581 and 115, Oct., 1932, and Jan., 1933.) Ferraro, A., and Kilman, J. E.

The authors give an extensive résumé of the present position of the toxic theory of mental disorders, particularly with reference to the part played by the toxic amines indole and histamine. In their second part they report experiments on cats given subcutaneous injections of indole and histamine, separately and together, and similar experiments on animals under the influence of potassium cyanide, which decreases the oxidizing power of cells. They found that the association of histamine and indole shortened the duration of the cat's life and aggravated the pathological changes detectable in the brain tissue. The lesions caused by injecting 100 mgrm. indole and 3 mgrm. histamine were very severe, and contrasted strongly with the mild lesions following either 100 mgrm. indole or 5 mgrm. histamine alone. The individual resistance of the different cats varies considerably. In dealing with human beings it is important to remember that the association of indole and histamine may not be constant, so that the effects may take very much longer to appear. Both indole and histamine damage the liver, the latter even in small doses. Both are detoxicated in the wall of the bowel, and if this wall is injured or diseased, then these toxic amines can reach the liver and damage it. Various authors during the last 30 years have described chronic and degenerative types of involvement of the liver in dementia præcox.

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