

*Sleep Induced by Sodium Amytal: An Abridged Method for Use in Mental Illness.* (Amer. Journ. Psychiat., vol. xciii, p. 57, July, 1936.) Broder, S. B.

The writer used sodium amytal for the induction of sleep in 58 patients. Several were treated with amytal and barbital as controls, but neither of these drugs was as effective. Patients tend to react differently on certain days, and the days on which they react most favourably should be used for intensive psychotherapy. The writer considers that the good results come from psychotherapy in the twilight state. Paranoid schizophrenics are very refractory to treatment, whilst those with simple schizophrenia and melancholia have little chance of improvement.

The "best day" is usually the third or fourth. If convulsions follow the sudden withdrawal of the drug they are best treated with epinephrine 1/16 gr. and morphine gr. iv. These convulsions, which are a form of "shock reaction", are frequently beneficial, i.e., of the 6 patients who reacted with convulsions, 3 had improved only slightly prior to the convulsions, but showed definite signs of recovery immediately after the convulsions.

G. W. T. H. FLEMING.

## 6. Pathology and Biochemistry.

*The Permeability of the Nerve Centres. II. The Effects of Crotalus Venom on the Permeability of the Isolated Cerebro-spinal Axes of Bufo viridis.* (Boll. Soc. Ital. Biol. Sper., vol. ii, pp. 764-5, 1936.) Marco, R. de

Diffusion of K from the preparation immersed in Ringer solution is increased by the addition of crotalus venom to the medium. The effect can be intensified by electrical stimulation.

*III. Variations in the Permeability of the Isolated Cerebro-spinal Axes of Bufo viridis by the Local Action of Morphine.* (Ibid., pp. 766-7.)

Low concentrations of morphine-HCl in the immersion fluid decreased the diffusion of K; higher concentrations increased it.

*IV. The Permeability of the Cerebro-spinal Axes of Bufo viridis under the Action of Trachinus draco and of Scorpaena scropha venom.* (Ibid., pp. 767-8.)

The presence of either venom in the oxygenated Ringer solution in which the preparations were immersed increased the rate of diffusion of K out of it. The rate was still further increased by simultaneous electrical stimulation.

PETER MASUCCI (Chem. Abstr.).

*A Study of the Cholinesterase Activity in Nervous and Mental Disorders.* (Quart. Journ. Med., vol. vi, pp. 1-3, 1937.) Tod, Henry, and Jones, M. S.

There was a significant rise in the cholinesterase activity of the blood-serum in the anxiety neuroses and a fall in catatonic stupors and epilepsy. These changes may be due to corresponding changes in metabolism and the amount of acetylcholine produced.

JOHN T. MYERS (Chem. Abstr.).

*Ascorbic Acid Content in the Brain of Glis glis During Hibernation.* (Ukrain. Biokhem. Zhur., vol. ix, pp. 879-89, 1936.) Fomin, S. V.

The ascorbic acid content of the cerebral hemispheres and cerebellum falls below the normal. It is assumed that the decrease in the oxidative processes during hibernation is connected with this phenomenon.

E. E. STEFANOWSKY (Chem. Abstr.).

*The Influence of Chemical and Hormonal Factors on the Higher Nervous Activity of Castrated Dogs.* (Ukrain. Biokhem. Zhur., vol. ix, pp. 489-505, 1936.) Arkhangelskii, V. M.

After castration the activity of dog cerebral cortex does not return to normal, either when left to itself or when different factors are applied to it. This is at least correct for animals of the inhibitory type.

E. E. STEFANOWSKY (Chem. Abstr.).