Passage into the Brain and Spinal Fluid of Urea Injected Intravenously. (*Compt. Rend. Soc. Biol., vol. cxxvii, pp.* 16–17, 1938.) *Riser, M., Valdiguié, P., and Guiraud, J.*

The urea passes quickly into the brain and muscles and reaches the same concentration in both. Passage into the spinal fluid is slow and reaches the maximum in about 3 hours (dog). L. E. GILSON (Chem. Abstr.).

The Action of Narcotics on the Brain Centre Regulating Osmotic Pressure of the Blood. (*Jikken. Yakubuts. Z., vol. xii, pp.* 1–19, 1936; *Japan. Journ. Med. Sci., vol. iv; Pharmacol., vol. x; Abstracts,* 14.) *Yamada, T.*

Injection of hypertonic 3% sodium chloride solution into the carotid arteries of rabbits causes a fall in osmotic pressure of the blood, whereas injection of hypotonic 0·2% solution produces an increase. This response by the regulating centre in the brain is paralysed by antipyrine, urethane, chloral hydrate, veronal and ether. Scopolamine depresses control of osmotic pressure of the carotid blood by its action on the parasympathetic nerve-endings that control osmotic pressure, not by central action. JAMES C. MUNCH (Chem. Abstr.).

The Influence of Urethane Narcosis on the Blood-pressure of Rabbits. (*Chiba Igk. Z., vol. xiv, pp.* 2747–67, 1936. *Japan. Journ. Med. Sci., vol. vi; Pharmacol., vol. x; Abstracts,* 23.) *Nuki, B., Ohashi, M., and Wada, K.*

By connecting a Hg manometer to the carotid artery of a normal, unanæsthetized rabbit, the average blood-pressure was found to be 113·6 mm. Hg, slowly decreasing about 16 mm. during one hour. Urethane narcosis produced a slight fall, although a few rabbits showed an increase in blood-pressure; the heart was stimulated in all animals. By a bloodless method of measuring pressure in the marginal ear artery the average pressure was 74·7 mm. Hg, and did not decrease during one hour in the normal or in the urethanized rabbits.

JAMES C. MUNCH (Chem. Abstr.).

The Neuromuscular Junction. VII: The Eserine-like Effects of Barium on Motor Nerve-endings. (*Chinese Journ. Physiol., vol. xii, pp.* 177–96, 1936.) *Feng, T. P.*

In its action on motor nerve-ending barium bears a striking resemblance to eserine. This action can only be accounted for on the basis of the chemical-mediation theory of neuromuscular transmission, as is the case for eserine. It is suggested, however, that with barium there is a continued leakage of acetylcholine from the nerve-ending, in contrast to a single liberation with eserine.

L. A. M. (Chem. Abstr.).

Comparative Study of two Short-acting Barbituric Acid Derivatives. (*Journ. Amer. Pharm. Assoc., vol. xxvi, pp.* 1248–9, 1937.) *Swanson, E. E., and Fry, Wm. E.*

A more extensive comparative study of "seconal" and of "sodium amytal" showed that (1) in all animals seconal had a distinctly smaller minimum anæsthetic dose and minimum lethal dose than sodium amytal; (2) except in mice seconal has a shorter duration of action than so dium amytal; (3) as the size of the animal increases, the duration of action of seconal diminishes more significantly than that of sodium amytal. A. PAPINEAU-COUTURE (Chem. Abstr.).

Ophthalmic Reaction to Tryparsamide in the Treatment of Neurosyphilis. (*Rhode Island Med. Journ., vol. xx, pp.* 169–74, 1937.) *Muncy, W. M.*

From a study of 40 cases of neurosyphilis treated with tryparsamide, it is concluded that eye reactions to the drug cannot be anticipated from the condition of the eyes before treatment, but apparently are due to individual idiosyncrasy or

allergic susceptibility. The presence of a contracted eye-field is not a definite contra-indication to treatment with tryparsamide. Frequently ocular symptoms attributed to the drug exist before treatment and are due to the syphilis.
M. H. (Chem. Abstr.).

The Prevention of Nutritional Encephalomalacia by Gelatine. (*Chinese Journ. Physiol., vol. xii, pp.* 281–8, 1937.) *Ni, T. G.*

Nutritional encephalomalacia in chickens caused by the special diet of Pappenheimer and Goettsch is preventable by the addition of fat-free gelatine. It is considered that gelatine inhibits in some way the excessive activity of the Rouget cells which cause prolonged vasoconstriction with subsequent necrosis of areas in the cerebrum and cerebellum. L. A. M. (Chem. Abstr.).

Some Undescribed Pharmacological Properties of Bulbocapnine. (*Journ. Pharmacol., vol. lxii, pp.* 16–25, 1938.) *Molitor, H.*

Bulbocapnine produces a marked peripheral vasodilation in the ear, extremities and kidney, while its effect on the intestinal circulation is slight. Several of its effects suggest parasympathetic stimulation ; hence the effects of atropine injection and of cutting the vagi on the bulbocapnine action were studied. Although such symptoms as salivation, defæcation and miosis were abolished, the action on the peripheral circulation was not affected. Repeated administration does not materially affect the vascular action of bulbocapnine itself, but decreases the effect of a subsequent adrenaline injection. The effects of pituitrin are not changed. The movements of intestine *in vitro* and *in situ* are depressed by bulbocapnine. The coagulation time of the blood is not affected. The vaso-constrictor reflexes regularly observed in the rabbit ear after sensory, thermal or mechanical stimulation are completely suppressed. L. E. GILSON (Chem. Abstr.).

The Effects of a New Brain-stimulating Agent, Aktedron, in Health and in Disease. (*Orvosi Hetilap, vol. lxxxi, pp.* 1151–6, 1937.) *Lehoczky, T.*

Aktedron (benzedrine phosphate) stimulates the functions of the cerebral cortex and is strongly euphoristic. No increase of blood-pressure was observed, but in three cases the abnormal electrocardiograph curve was much improved.
S. S. DE FINALY (Chem. Abstr.).

The Biological Effect of Aktedron. (*Orvosi Hetilap, vol. lxxxii, pp.* 32–6, 1938.) *Csinády, J., and Dirner, Z.*

Caffeine sodium benzoate (0·2 grm.) and 0·2 grm. aktedron (benzedrine phosphate) were administered on successive days. Physical well-being and some forms of mental activity were increased, but work requiring mental concentration was retarded. S. S. DE FINALY (Chem. Abstr.).

The Effect of Benzedrine Sulphate on Children taking the New Stanford Achievement Test. (*Amer. Journ. Orthopsychiat., vol. vii, p.* 519, *Oct.*, 1937.) *Molitch, M., and Sullivan, J. P.*

The new Stanford achievement test was given to 96 boys between the ages of 10–17. About a week later 50 of the boys were given 10 mgrm. benzedrine and the remainder a placebo and retested. Twenty-six who either lost or failed to improve their total average score more than 5 points were given 20 mgrm. of benzedrine and again retested. Although 8·6% of the boys on the placebo showed a gain in their scores, yet the group as a whole showed a loss of 29 points of total (average) score. 32% of the boys on 10 mgrm. of benzedrine gained in their scores and the group as a whole showed a gain of 63 points. Of the boys who were retested, after having been given 20 mgrm. of benzedrine, 92·3% gained in their scores, and the entire group showed a gain of 117 points of total average score. G. W. T. H. FLEMING.