Addiction and Tolerance to Barbiturates: The Effects of Daily Administration and Abrupt Withdrawal of Phenobarbital-sodium and Pentobarbital-sodium in the Albino Rat. (*Journ. Pharm. and Exper. Therap., vol. lvii, p.* 245, *July,* 1936.) *Stanton, E. J.*

The writer found that rats do not become addicted to these two barbiturates in the sense of increased irritability following on withdrawal of the drug, but tend rather to show evidences of some cumulation of depressive effect.

G. W. T. H. FLEMING.

The Action of a Convulsant Barbiturate. (*Journ. Pharm. and Exper. Therap., vol. lvii, p.* 130, *June,* 1936.) *Knoefel, P. K.*

1·3 dimethylbutyl ethyl barbituric acid produces in intact animals, not depression, but violent convulsions. It is a true stimulant of the central nervous system, augmenting the reflex contraction of the tibialis anticus in spinal dogs and dogs anæsthetized with barbital. It is $\frac{1}{250}$ as active as strychnine, $\frac{1}{4}$ as active as picrotoxin, resembling the first more than the second in its apparent site of action. It is more active as a stimulant than caffeine, cocaine or ephedrine. Several closely related barbiturates show none of this stimulant action.

G. W. T. H. FLEMING.

The Analysis of the Barbiturate-Picrotoxin Antagonism. (*Journ. Pharm. and Exper. Therap., vol. lvii, p.* 130, *June,* 1936.) *Koppanyi, T., Linegar, C. R., and Dille, J. M.*

Both picrotoxin and metrazol are effective in saving the life of acutely poisoned dogs and rabbits. Doses of picrotoxin sufficient to antogonize the barbiturate are more likely to produce hyperexcitability and convulsions than similarly effective doses of metrazol. Picrotoxin and metrazol are almost equally effective as respiratory stimulants, but picrotoxin is more effective as a circulatory stimulant. Both these drugs have a denarcotizing action due to cortical stimulation. In several dogs, sodium pentobarbital abolished the excitability of the motor cortex, which could be promptly restored by appropriate doses of picrotoxin.

Picrotoxin does not augment the destruction of barbiturates, but in some cases the awakened animals, due to their better physiological conditions, are able to destroy larger amounts of hypnotics.

G. W. T. H. FLEMING.

Some Undescribed Pharmacological Properties of Bulbocapnine. (*Journ. Pharm. and Exper. Therap., vol. lvii, p.* 135, *June,* 1936.) *Molitor, H.*

Bulbocapnine has a marked vasodilator effect, most pronounced in the vessels of the ear, leg and kidney, while the intestinal vessels are less affected. This action is peripheral. Atropine, which inhibits several bulbocapnine symptoms (such as salivation, miosis, defæcation), does not interfere with this action, nor does it prevent its action on the isolated frog's heart or rabbit's intestine. The vasoconstrictor effect of adrenaline is frequently decreased after injection of large doses of bulbocapnine, especially in cats. Bulbocapnine inhibits the vascular reflexes in the ears of rabbits which regularly follow sensory, mechanical or thermal stimulation and renders all types of stimulation ineffective.

G. W. T. H. FLEMING.

A Comparison of the Thio-analogue of Nembutal to Other Short-Acting Depressants. (*Journ. Pharm. and Exper. Therap., vol. lvii, p.* 149, *June,* 1936.) *Werner, H. W., and Pratt, T. W.*

Pentothal or thionembutal, evipal, thio-amytal, nembutal and avertin are the subjects of this study.

The M.L.D. figures in mgrm. per kilo are:

Intravenous	35	80	80	45	..	
Colonic	110	175	190	65	700	(avertin)
Oral	600	1200	1200	275	..	

The ratios of intravenous to oral toxicity in the same order are: 1/17·1, 1/15, 1/15, 1/6·1.

The periods of narcosis in minutes with 60% of the M.L.D. are:

Intravenous	28	42	45	130	..
Colonic	52	83	80	144	104 (avertin)
Oral	600	600	900	850	..

The short duration of action of the thio-barbiturates is probably an expression of decreased stability resulting from the substitution of sulphur for oxygen in position 2.

G. W. T. H. FLEMING.

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 producing prolonged narcosis in 58 patients. The narcosis was not so prolonged as is usual, and was kept light enough so that psychotherapy could be used systematically. Patients with paranoid schizophrenia were refractory to treatment, while those with simple schizophrenia, mental deficiency and melancholia were little improved. Convulsions appeared in some cases, probably due to the rapid withdrawal of the drug, and are termed by the author "shock reactions"—he considers them as frequently beneficial. The writer considers that the whole success of narcotic treatment depends on the systematic interruption of the treatment for psychotherapy.

G. W. T. H. FLEMING.

The Treatment of Convulsions in Children. (*Amer. Journ. Psychiat. vol. xcii, p.* 1433, *May,* 1936.) *Peterman, M. G.*

The writer points out that treatment with the ketogenic diet has been the most favourable since the advent of luminal. Ketogenic diet + dehydration + luminal will control epilepsy in 50 % of cases and will greatly reduce the seizures in another 20 %. Eley states that if a careful differential diagnesis is made, including an encephalogram, 90 % of epileptic children with normal encephalograms can be kept free from seizures on a ketogenic diet.

G. W. T. H. FLEMING.

Anti-retentional Therapy in Conditions Ascribed to Intracranial Liquid Accumulation. (*Amer. Journ. Psychiat., vol. xcii, p.* 1281, *May,* 1936.) *Földes, E.*

The writer's anti-retentional diet is rich in protein which is included for its diuretic action. The nucleoproteins because of their richness in purins are most important. Carbohydrates are restricted because of the retention of liquid which follows their ingestion in large quantities. Fats are also restricted as they cause retention of liquid. Sodium chloride is used with moderation. At the same time there is a restriction of liquid intake. Vitamins are included in necessary amounts. The diet should be one of low caloric value. Luminal was administered as a sedative, as it has a stabilizing effect on water and mineral metabolism and may under certain circumstances prevent the retention of liquids. Small doses of atropine sulphate were included, as it dilates the smaller blood-vessels of the skin. In epilepsy the results were uniformly good in all cases. In migraine all symptoms disappeared in a number of cases, and in others there was a marked improvement.

G. W. T. H. FLEMING.

Glycocoll Treatment of Progressive Muscular Dystrophy. (*Z. klin. Med., vol. cxxix, pp.* 499–511, 1936.) *Borst, W., and Möbius, W.*

Of four cases of progressive muscular dystrophy, only one improved on administration of glycocoll. The deranged muscular metabolism and the excessive creatine excretion in the urine were not restored to normal. Compounds of unknown