Barbital, ·25 grm. for 13 days, 65% ; rutonal, ·2 grm. for 14 days, 49% ; dial, ·1 grm. for 13 days, 30% ; gardenal, ·2 grm. for 14 days, 25%. The barbituric acids are resistant to putrefaction. A. W. Dox (Chem. Abstr.).

The Antidotal Action of Picrotoxin, Strychnine and Caffeine in Acute Intoxication by the Barbiturates. (*Journ. Pharmacol., vol. xlix, p.* 133, 1933.) *Maloney, A. H.*

Picrotoxin is superior to either strychnine or cocaine as an antidote to eleven typical barbiturates. T. H. Rider (Chem. Abstr.).

The Influence of Barbital on the Activity and Learning of White Rats. (*Journ. Comp. Psychol., vol. xvi, p.* 317, *Dec.*, 1933.) *Omwake, L.*

The sodium salt of barbital (veronal) was used, and administration was by intraperitoneal injection—a method which was found to be safe and satisfactory. When barbital was injected in doses of 100 mgrm. per kilogramme of body-weight, on alternate days for four months, the activity of the injected rats was slightly lower than that of the controls ; there was also a lowering of learning ability. The constant use of barbital over long periods of time and in large doses is relatively safe ; its therapeutic use would never be contra-indicated on the basis of possible chronic physical or mental changes caused thereby. M. Hamblin Smith.

After-effects of Hypnotics (*Barbituric Acid Derivatives*). (*Arch. Exp. Path. Pharm., vol. clxx, p.* 347, 1933.) *Mezey, K.*

The computing efficiency is decreased on the morning after the ingestion of hypnotic doses of allonal, somnifen or dial. Luminal is even more depressant, veronal somewhat less. Veronal and luminal cause increased reaction time and decreased motor performance as after-effects. H. Eagle (Chem. Abstr.).

Habituation and Cumulation Phenomena. III : The Antagonism of Some Barbituric Acid Derivatives. (*Arch. Exp. Path. Pharmacol., vol. clxxii, p.* 645, 1933.) *Bousmann, M. R.*

The administration of phanodorm to dogs prevents the anti-diuretic action of phenobarbital or prominal given later the same day. The anti-diuretic action of tonephin cannot be prevented. The efficacy of hypnotics in preventing anti-diuresis varies inversely with the ease of detoxication *in vivo*.
H. Eagle (Chem. Abstr.).

Studies on Barbiturates. (*Arch. Int. Pharmocodynamie, vol. xlvi, p.* 76, 1933.) *Koppanyi, T., Murphy, W. S., and Krop, S.*

Barbiturates can be determined colorimetrically by adding cobalt acetate and barium hydroxide dissolved in absolute methyl alcohol to a chloroform extract of the unknown. Human beings, cats and dogs excrete in the urine 40–90% of barbital taken by mouth ; fowls excrete approximately 30%. The rate and degree of excretion are not affected by diuretics. The excretion of the other barbiturates (dial, neonal, phenobarbital, pernocton and amytal) is less than that of barbital, decreasing in the order named. The blood concentration of barbital in the first two hours after its administration decreases sharply (fixation by the tissues), followed by a slow decrease (renal excretion). Barbital added to blood *in vivo* or *in vitro* is changed to diethyl barbituric acid. The ratio of plasma to erythrocyte concentration is 3 : 1. The brain does not store more barbital than do other organs. H. Eagle (Chem. Abstr.).

The Inhibition of Diuresis by Hypnotics. (*Arch. Int. Pharmacodynamie, vol. xlvi, p.* 97, 1933.) *Walton, R. P.*

Paraldehyde and sodium phenobarbital inhibit diuresis in dogs. The former is a safe anæsthetic, the latter is unsafe. " Metzrazol " effectively counteracts