

tion of action is much longer. Chlorothiazide especially potentiates the action of ganglionic blocking agents presumably by decreasing plasma volume through sodium excretion. (Harrington, M.: *Pharmacology of Hypotensive Drugs*, *Brit. Med. J.* 1: 717 (Mar. 5) 1960.)

METHOHEXITAL Methohexital appears to be more potent and shorter acting than thiopental. In order to compare these two agents they were studied in 5 patients, as well as in 4 dogs, anesthetized either with methohexital or thiopental. The level of anesthesia was controlled automatically, and the test doses of methohexital and thiopental introduced as disturbance factors. In terms of their action in man in producing electroencephalographic changes commonly associated with deepening barbiturate anesthesia, methohexital was 2.78 times as potent as thiopental. The 95 per cent confidence limits were 3.5 and 2.2, respectively. In the cross-over experiment carried out in the 4 dogs, the potency of methohexital relative to thiopental was 3.07. (Bellville, J. W., and others: *Relative Potencies of Methohexital and Thiopental*, *J. Pharmacol. & Exper. Therap.* 129: 108 (May) 1960.)

NARCOTICS The respiratory response of normal man to therapeutic doses of narcotics is a diminution in alveolar ventilation primarily as a result of a decrease in tidal exchange. The mechanism of the depression of respiration and circulation is only vaguely understood. A large number of narcotics have been made available for clinical use but there is no convincing evidence that any of the synthetic substances surpass morphine. (Eckenhoff, J. E., and Oech, S. R.: *Effects of Narcotics and Antagonists Upon Respiration and Circulation in Man*, *Clin. Pharmacol. & Therap.* 1: 483 (July-Aug.) 1960.)

METHOXYFLURANE This anesthetic agent is a nonexplosive liquid that produces profound analgesia accompanied by remarkable relaxation with apparently low toxicity. When used as the primary or sole anesthetic agent, the prolonged somnolence outweighs the advantages of prolonged analgesia. From experience in administration of the drug to 206 patients methoxyflurane seemed to have

a definite but limited use as a supplementary agent to provide additional analgesia. (Wasmuth, C. E., and others: *Methoxyflurane—New Anesthetic Agent*, *Cleveland Clin. Quart.* 27: 174 (July) 1960.)

NORADRENALINE The effects of sympathetic stimulation in the dog's hind leg include both vasodilator and vasoconstrictor changes. In the presence of atropine the vasodilatation produced by the cholinergic sympathetic fibers is excluded. After an infusion of noradrenaline and the disappearance of its direct effects, the threshold of sympathetic stimulation is reduced, often considerably, and the effect of a given strength of stimulus is increased. The infusion of adrenaline has little or no effect. It is suggested that the extractable noradrenaline present around sympathetic nerve endings forms a store from which noradrenaline is released by a sympathetic impulse. This store may also take up noradrenaline from the blood. The fall in threshold following an infusion of noradrenaline suggests that before the infusion noradrenaline released by stimulation is at once returned to the store and is thus not available for an action on the effector organ. After an infusion, when the store is full, the noradrenaline released is not taken up and therefore exerts an action. (Burn, J. H., and Rand, M. J.: *Relation of Circulating Noradrenaline to the Effect of Sympathetic Stimulation*, *J. Physiol.* 150: 295 (Feb.) 1960.)

ISOPROPYLNOREPINEPHRINE Intravenous infusion of isopropyl-norepinephrine (0.1 $\mu\text{g./kg./min}$) in man increases the heart rate and systolic blood pressure and causes a fall in diastolic blood pressure. Blood flow in the forearm and calf shows a marked initial transient increase followed by a lesser but sustained increase. Blood flow in hand and foot shows an initial, small and transient increase only. There is a small increase in respiratory rate and a sustained increase in the depth of breathing. Oxygen consumption increases. Blood sugar rises slowly and there is no change in blood lactate. There is no difference between the response in normal and sympathetomized limbs. Intra-arterial infusion of isopropyl-norepinephrine (0.05–0.2 $\mu\text{g./minute}$) causes the same change in blood flow in the