

of impulses is changing to the idea that labile and integrative processes take place at several loci within different parts of the neuron, and the neuron does not pass on all signals in a one-to-one ratio, but may exert some selective and evaluative action on received signals. Spontaneous neuronal activity may rest on a continuous change of state of intraneuronal subthreshold potentials, which in turn determines the cell's responsiveness to input stimuli. (Bullock, T. H.: *Neuron Doctrine and Electrophysiology*, *Science* 129: 997 (April 17) 1959.)

FLUOTHANE Most of over 2000 surgical and obstetrical patients received the agent via a semi-closed circle absorption technique from the Foregger copper kettle machine. Eight known asthmatic patients received Fluothane with no complications. Although no difficulties were experienced with its use for delivery, fluothane has been abandoned for deliveries because of reports of excessive bleeding postpartum. Considerable reduction of the pharyngeal and laryngeal reflexes was noted with less "bucking" on the endotracheal tube even under light anesthesia. Rapid reversibility of action, reduction of nausea and vomiting, and minimal complications were principal advantages. (Ausherman, H. M., and Adan, A.: *Fluothane: A New Nonexplosive Volatile Anesthetic Agent*, *South. M. J.* 52: 46 (Jan.) 1959.)

FLUOTHANE The incidence of hypotension in a group of 100 patients anesthetized with Fluothane was compared with hypotension noted in a similar group of patients anesthetized with other agents. Fifty-nine of those anesthetized with Fluothane exhibited a fall in blood pressure during induction, while only 31 of those anesthetized with other agents showed a similar hypotension. Four possible causes of hypotension have been suggested: ganglion blocking; myocardial depression; central depression of the vasomotor center, stimulation of baroreceptors. Data is presented which makes the first two seem unlikely. No data is available to support the third thesis. Use of vaporizers delivering a known amount of Fluothane into a semi-closed system with 4 to 6 liters constant gas flow is recommended. If a

closed system is used, the vaporizer must be placed between the gases being supplied from the machine and the inlet to the circle system. (Bourgeois-Gavardin, M., and others: *Fluothane: Incidence and Significance of Hypotension*, *South. M. J.* 52: 53 (Jan.) 1959.)

ADDICTION TO FLUOTHANE A case report and court disposition of an anesthetist accused of addiction to Fluothane are presented. (*Medicine and the Law: Lancet* 1: 464 (Feb. 28) 1959.)

ANALGESICS In the rat, the ratio of the analgesic to the respiratory depressant potency was the same for morphine, codeine, diamorphine, and methidone. The relative respiratory depressant activity of pethidine tended to be less, but the difference was not significant. Some compounds (morphine) had a greater effect on gastrointestinal propulsion than others (pethidine) when given at moderate analgesic dose levels. (Green, A. F.: *Comparative Effects of Analgesics on Pain Threshold, Respiratory Frequency and Gastrointestinal Propulsion*, *Brit. J. Pharmacol.* 14: 26 (March) 1959.)

HYDROCORTISONE LEVELS The effect of therapeutic doses of morphine and nalorphine on ACTH release in man has been studied. The primary effect of therapeutic doses of morphine or nalorphine on early morning ACTH release in sedated normal subjects is a suppressant one. In non-sedated subjects, morphine was capable of depressing mid-day ACTH release as well as ACTH release induced by a vasopressor. This effect may vary depending upon the responsiveness of the recipient. (McDonald, R. K., and others: *Effect of Morphine and Nalorphine on Plasma Hydrocortisone Levels in Man*, *J. Pharmacol. & Exper. Therap.* 125: 241 (March) 1959.)

VASOPRESSORS The critical factor in maintenance of adequate circulating volume depends on moment vasomotor control at the level of metarterioles and precapillaries to prevent excess amounts of blood going through capillary beds and being sequestered there. It is estimated that 17 per cent or more of circulating volume can be pooled in peripheral capillary beds. When low blood volume shock