

administered. The patient's body temperature was lowered to 92 F. by exposure to cold air from an electric fan. Diuresis occurred during the cooling. Recovery was uneventful, and infant and mother were discharged from the hospital 22 days after the onset of the attack. (Malcolm, J. E., and others: *Fulminating Eclampsia Treated by Hypothermia*, *Lancet* 1: 863 (April 25) 1959.)

HYPOTHERMIA After hypothermia, patients may be rewarmed by placing them between layers of a blanket through which warm water from a faucet is circulated. This obviates the need for an elaborate system with pumps. A regulating valve to assure the proper temperature of the water is attached to a mixing faucet from hot and cold pipes. A thermostatic switch protects the patient in case the water temperature exceeds a preset level. (Knowles, G. S. A.: *Control of Temperature in Rewarming Blankets During Hypothermia*, *Lancet* 1: 1231 (June 13) 1959.)

HYPOTHERMIA Profound hypothermia (10 to 15 C.) has been produced in a series of animals (dogs) by the use of an extracorporeal circuit containing two reservoirs, one to collect pulmonary venous blood from the left atrium, and the other to collect systemic venous blood from the right atrium. The blood from the left atrium is circulated through a heat exchanger. By this combination, complete circulatory arrest was produced for thirty minutes, followed by rewarming and recovery. (Drew, C. E., Keen, G., and Benazon, D. B.: *Profound Hypothermia*, *Lancet* 1: 745 (April 11) 1959.)

HYPOTHERMIA By the technique described above, three persons have been operated upon for repair of congenital cardiac defects. Body temperature was lowered to 15 C., ventricular fibrillation did not occur in any of the three patients four years or less of age. In one patient total circulatory arrest lasted 45 minutes. One patient died shortly after completion of the operation. The other two recovered and have shown no evidence of neurological or other damage. (Drew, C. E., and Anderson, I. M.: *Profound Hypothermia*

in Cardiac Surgery, *Lancet* 1: 748 (April 11) 1959.)

NEOMYCIN APNEA Neomycin exerts a curare-like action at the myoneural junction so that complete or partial paralysis ensues. This neuromuscular blocking action is potentiated by ether and muscle relaxants but can be antagonized by neostigmine and calcium. The presence of an optimum concentration of calcium at the myoneural junction is essential for the effective release of acetylcholine after stimulation of a motor nerve. The neuromuscular blockade produced by streptomycin and that resulting from magnesium is reversed by calcium. (Jones, W., and Philip, G.: *Calcium Treatment for Ineffective Respiration Resulting from Administration of Neomycin*, *J. A. M. A.* 170: 943 (June 20) 1959.)

CURARIFORM ACTION Case histories of 3 patients with infectious processes treated with streptomycin were presented. All 3 patients complained of muscular weakness, and two had visual difficulties. When streptomycin was stopped and neostigmine and atropine were given, the symptoms disappeared promptly. (Loder, R. E., and Walker, C. F.: *Neuromuscular-Blocking Action of Streptomycin*, *Lancet* 1: 812 (April 18) 1959.)

BELLADONNA DRUGS The curarizing properties of atropine and scopolamine quaternized by a polymethylene chain at the nitrogen groups have been determined in rabbits by the head-drop crossover procedure. Atropine and scopolamine so treated become potent curarizing agents. They also retain much of the activity of the parent compounds with respect to their ability to inhibit blood pressure drop from vagal stimulation and to produce mydriasis. (Eckfeld, D. K.: *Curarizing and Atropine-Like Properties of Bis-Atropinium and Bis-Scopolaminium Compounds*, *J. Pharmacol. Exper. Therap.* 126: 21, (May) 1959.)

ATROPINE Physostigmine or adrenergic central nervous system stimulants (amphetamine and methamphetamine) produce a fast electroencephalographic activity. High midbrain resection in albino rabbits abolishes the

Downloaded from http://ajph.aaphublics.org/ at University of California, San Diego on November 11, 2014

pattern of arousal. In the experiments reported, atropine is shown to similarly block the electrocortical effects of adrenergic and cholinergic drugs. Atropine can induce an electroencephalographic picture of sleep without concomitant behavioral signs in the rabbit. This suggests that there is little correlation between electroencephalographic patterns and behavior. They also indicate that an electroencephalographic arousal pattern is not necessary for consciousness. (White, R. P., and Daigneault, E. A.: *Antagonism of Atropine to Electroencephalographic Effects of Adrenergic Drugs*, *J. Pharmacol. & Exper. Therap.* 125: 339 (April) 1959.)

MORPHINE Eighty-five nonaddict, non-patient, adult male college and graduate students received a dose of 10 mg. of morphine per 70 kilograms of body weight, or 1 ml. of saline subcutaneously. In comparison with the placebo, morphine did not reduce the hunger responses studied in the majority of these individuals. The demonstration is important because of the importance which has been attributed to the hunger reducing power of morphine in addicts. (Smith, G. M., and Beecher, H. K.: *Effect of Morphine on Subjective Response of Hunger in Normal Subjects*, *J. Pharmacol. & Exper. Therap.* 129: 63 (May) 1959.)

MORPHINE Sixty-one nonaddict, non-patient, adult male, college and graduate students were given subcutaneous injections of a placebo or morphine (10 mg./70 kg. of body weight). Before and after medication, the subjects gave information concerning sensations and moods. The major subjective responses to morphine in the 'somatic' area were dizziness, nausea, pruritis, headache, and feeling of warmth. The responses in the 'non-somatic' area were principally mental clouding, physical inactivity, and mental inactivity. (Smith, G. M., and Beecher, H. K.: *Measurement of "Mental Clouding" and Other Subjective Effects of Morphine*, *Surg. Gynec. & Obst.* 126: 50 (May) 1959.)

DIPIPANONE Clinical use of a new synthetic narcotic, dipipanone hydrochloride

(Pipadone), in anesthesia revealed certain characteristics different from other narcotics now used. Given as premedication, the respiratory rate is slowed and minute volume decreased in spite of an increase in tidal volume. During thiopental anesthesia, apnea is easily produced with intravenous dipipanone. A slowing of the cardiac rate was evident, as well as peripheral vasodilatation, leading to hypotension in some cases, especially when Fowler's position was utilized. As a post-operative analgesic, 25 mg. of dipipanone gave greater pain relief than 100 mg. of meperidine. Dipipanone demonstrated little or no hypnotic effect, and sleep patterns on electroencephalogram were absent. Amnesia was not produced. Complete disappearance of the cough reflex was noted in most patients. (Lamontreux, L., and others: *Preliminary Clinical Study of Dipipanone Hydrochloride (Pipadone) in Anaesthesia*, *Canad. M. A. J.* 80: 968 (June 15) 1959.)

PHENOTHIAZINE A new phenothiazine drug, Trimeprazine, has been compared with a barbiturate as a premedicament in 200 young children. Its effects on recovery and vomiting after operation have been assessed. It proved to be palatable and easy to administer. Its hypnotic effect was equal to that of a barbiturate. It did not prolong the period of recovery, and fewer children vomited or were restless after operation, although the difference was not statistically different. (Cope, R. W., and Glover, W. J.: *Trimeprazine Tartrate for Premedication of Children*, *Lancet* 1: 858 (April 25) 1959.)

NAUSEA AND VOMITING Effects of Trilafon on vomiting in 265 obstetrical patients was compared with the effect of routine sedation in 264 similar patients in active labor. The group receiving Trilafon showed an incidence of nausea and vomiting that was 75 per cent lower than that in the control group. (Anderson, G., and others: *Effect of Trilafon on Nausea and Vomiting During Labor*, *Obst. & Gynec.* 13: 504 (April) 1959.)

VASOPRESSORS Restoration of the systemic blood pressure to normal levels by vaso-

Downloaded from <http://ajphaphapublications.sagepub.com/> at UNIV OF CALIFORNIA LIBRARY on March 20, 2014