which are beneficial in hypothermia: It reduces oxygen uptake and heat production, thereby aiding in cooling. It suppresses shivering, which elevates the oxygen requirements as much as 400 per cent. It is a vasodilator, particularly of the cerebral arteries, and as such may counteract the severe vasoconstriction of deep hypothermia. (3) Hypothermia protects both the life and the brain of the asphyxiated newborn human infant. There appears to be no rational basis for the use of heat as part of the treatment of asphyxia. (*Miller, J. A., and Marini, A.: Cardiac Activity in Apneic Five Hundred Eighty Gram Human Fetus, J. A. M. A. 167: 976 (June 21) 1958.*)

HYPOTHERMIA Increased tolerance of a cold dog heart to bypass and asystole produced by potassium, magnesium or neostigmine was postulated and recovery after 52 minutes was demonstrated. Increased tolerance to bypass during hypothermia was demonstrated as compared to a comparable group of normothermic dogs. (*Scaly, W., and others: Potassium, Magnesium and Neostigmine for Controlled Cardioplegia, A. M. A. Arch. of Surg. 77: 33 (July) 1958.*)

HYPOTHERMIA A marked increase in cooling time, decrease in incidence of ventricular fibrillation or ease of resuscitation occurred when fluids containing dextran, glycine, dextrose and fat emulsion in saline were administered during the cooling period in dogs. It is postulated that this effect may be due to buildup of glycogen reserves in the myocardium and reserves of phosphate bond energy. The prolongation of cooling time and rapid rewarming occur when nutrient solutions are supplied and appear not to be attributable to the glycine alone. (*Caranna, L., Telmosse, F., and Swan, H.: Effect of Intravenous Nutrient Solution on Ventricular Fibrillation in Hypothermic Dog, A. M. A. Arch. of Surg. 76: 394 (Mar.) 1958.*)

RENAL HYPOTHERMIA After experimental removal of the right kidney in dogs, the blood supply to the left kidney was occluded and that kidney was cooled. In the control group with no cooling the mortality was 100 per cent. Percentage of survival in the animals with kidneys cooled to 20–25 C. was 30 per cent, and those cooled to 10–15 C. was 80 per cent, and those cooled to 0–5 C. was 100 per cent. In the dog regional renal hypothermia protects against lethal ischemia. (*Stueber, P., and others: Regional Renal Hypothermia, Surgery 44: 77 (July) 1958.*)

MEDICAL HYPOTHERMIA In a study involving 26 critically ill patients, 13 were cooled from 40 C. or above to 35–36 C. while the control group of 13 were not cooled. There were 3 survivors and 8 improved patients in the cooled group. There were no survivors and 3 improved patients in the group that was not cooled. Neurosurgical patients seemed to benefit most from the cooling. (*Reeves, M., and Lewis, F.: Total Body Cooling in Critically Ill Febrile Patients, Surgery 44: 84 (July) 1958.*)

ATROPINE-LIKE DRUGS After graded subcutaneous doses of atropine, methanthelinium (Banthine), proantheline (Pro-Banthine), oxyphenonium (Antrenyl) and hyoscine in humans observations were made on heart rate, salivary secretion, pupil size, near point of accommodation, micturition, and palmar sweating. Small doses which depressed salivary secretion and palmar sweating did not necessarily accelerate the heart or slow micturition. Atropine and hyoscine, tertiary amines, had a greater effect than the other drugs, quaternary amines, on the iris and ciliary muscle compared with the effects on the other end organs studied as the dose of a drug was increased, the peak effect on the heart rate and salivary secretion tended to occur sooner, but the peak effect on the iris and ciliary muscle always occurred later. (*Herxheimer, A.: Comparison of Some Atropine-Like Drugs in Man, with Particular Reference to Their End Organ Specificity, Brit. J. Pharmacol. 13: 184 (June) 1958.*)

ANTIHISTAMINES The objective of an extensive series of experiments was to measure the antihistaminic, anticholinergic and local anesthetic potencies of 17 drugs in current clinical use. On the basis of the potency values obtained the drugs were compared in regard to their selectivities.

With the exception of Antistine, all the antihistamines had an anesthetic potency greater than procaine but less than dibucaine or tetracaine. A high degree of relative selectivity of antihistamines to produce cutaneous anesthesia at lower concentrations than they produced corneal anesthesia was in contrast with the narrow selectivity of anesthetics, with the exception of procaine which in this sense acts like the antihistamines. (*Naranjo, P., and Naranjo, E. B.: Local Anesthetic Activity of Some Antihistamines and Its Relationship with Antihistaminic and Anticholinergic Activities, Arch. internat. pharmacodyn. 113: 311* (*Jan.*) *1958.*)

Pertinent information is the unpublicized report by Dr. W. P. Kleitsch, Veterans Hospital, Omaha, Neb., concerning the use of tripelennamine (Pyribenzamine) as a topical anesthetic agent. Over a four year period Doctor Kleitsch used a solution of 2 per cent tripelennamine and 0.5 per cent tetracaine to produce satisfactory topical anesthesia for 455 peroral endoscopic procedures. Five cc. of the mixture on sponges to the pyriform sinuses and 5 cc. instilled into the trachea produced more satisfactory anesthesia than that following 1 per cent tetracaine and produced less toxicity than that resulting from the use of either 2 per cent tetracaine or 10 per cent cocaine.—*Editor.*

NOREPINEPHRINE The effect of bleeding and *l*-norepinephrine on the oxygen tension in the myocardium was studied. In 19 dogs tension of oxygen decreased as the bleeding progressed. The average drop was 39 per cent of the control valve. When the blood pressure was restored to normal with *l*-norepinephrine, the oxygen tension returned to normal or above. When the infusion was stopped, the blood pressure and oxygen tension decreased. Transfusion of blood also restored the blood pressure and oxygen tension. Evidence is submitted that effective alteration of survival rates can be accomplished with *l*-norepinephrine if the infusion is begun within 5 minutes after hypotension develops. This suggests that ischemia of vital organs cannot be prolonged if the animal is to survive. (*Simeone, F., and others: Effect of l-Norepinephrine upon Myocardial Oxygen Tension and Survival in Acute Hemorrhagic Hypotension, Surgery 44: 168* (*July*) *1958.*)

ADRENOSEM Because of hemostatic properties attributed to this drug, it was evaluated during pulmonary surgery using the double blind technique. Rumpel-Leede Tests, bleeding times and evaluation of bleeding and oozing indicate that adrenosem has no effect in reducing small vessel bleeding in pulmonary surgery. Casual clinical observation cannot be regarded as a reliable method of drug evaluation. (*Marcus, A. J., and Spaet, T. H.: Ineffectiveness of Adrenosem in Pulmonary Surgery, J. of Thoracic Surg. 35: 821* (*June*) *1958.*)

ANALEPTICS Megimide appears to increase tolerance to alcohol. Eyelid flickering, muscle twitches, anxiety, dizziness and feelings of dissociation were reported in two normal volunteers. Focal electroencephalographic discharges occurred but not from a local brain area as in epilepties. (*Margerison, J. H.: Effect of Bemegride* (*Megimide*) *on Normal People, Electroencephalog. & Clin. Neurophysiol. 18: 541* (*Aug.*) *1958.*)

BRONCHOSPASM The effect of histamine on the human bronchiole was to produce edema with narrowing of the lumen. Adrenalin caused widening of the lumen. In neither instance was there a change in bronchiole size. Nerves and drugs have little effect on the bronchiolar musculature whose function is the maintenance of tone. Probably bronchiolar caliber is determined by the pleural pressure. Clinical bronchospasm bears little relation to intrinsic bronchial musculature and is probably due to edema or mechanical block of the lumina. (*Gilfillan, R. R.: Clinical Studies on Bronchospasm, J. Thoracic Surg. 36: 63* (*July*) *1958.*)

DRUG SYNERGISM A clinical double blind study using morphine and papaverine alternately showed that morphine was a more effective analgesic following papaverine than when preceding it. The mode of action of this synergism was discussed together with errors in results of other clinical trials due to possible drug interaction. (*Macris, S. G., and others: Papa-*