citrate 0.54 per cent, and small quantities of Prostigmin, was compared to a control solution of potassium citrate 1.6 per cent. Both solutions were effective in producing cardiac arrest in hypothermic dogs. The danger of serious arrhythmia during ventriculotomy in the hypothermic animal was almost abolished using controlled cardiac arrest. (*Glenn, W. G., and others: Method for Controlled Cardiac Arrest as Adjunct to Open Heart Surgery, J. Thoracic Surg. 32: 604 (Nov.) 1956.*)

VENTRICULAR FIBRILLATION Dogs were allowed to develop ventricular fibrillation during hypothermia and maintain the fibrillation for thirty minutes. One group of dogs had cyanotic heart disease induced prior to experiments. Fifteen dogs had pulmo-aortic fistula created and a third group were normal dogs. Ninety-two per cent of the controls and cyanotic group were resuscitated, but only 53 per cent of the chronic heart strain group. The implication is that ventricular fibrillation developing during hypothermia in the presence of a diseased heart should be strenuously avoided. (*Riley, P. A., Barila, T. G., and Hughes, C. W.: Ventricular Fibrillation During Hypothermia A. M. A. Arch. Surg. 73: 985 (Dec.) 1956.*)

CHEYNE-STOKES Increased transit time of blood from heart to brain produces periodic breathing in dogs, similar to Cheyne-Stokes respirations in humans. A circulatory delay system was inserted between the heart and brain of thirty dogs to prolong the transit time of blood from lungs to brain. Cheyne-Stokes breathing was produced in each animal and the duration of the cycle increased with increase in volume of the delay system. Variations in per cent oxygen saturation and carbon dioxide concentrations of the blood were directly related to the phases of the Cheyne-Stokes breathing. (*Guyton, A. C., and others: Basic Oscillating Mechanism of Cheyne-Stokes Breathing, Am. J. Physiol. 187: 395 (Nov.) 1956.*)

PULMONARY EDEMA Antifoam compound no. 5507 is more effective in treating epinephrine-induced pulmonary edema in rabbits than is 10 or 20 per cent ethyl alcohol or octyl alcohol. Compound no. 5507 consists of silicone 0.01 per cent, Superinone (a polyhydric alcohol) 0.75 per cent, glycerin 1 per cent and potassium bicarbonate 1 per cent. After negative toxicity studies on animals, the compound was used to treat successfully the pulmonary edema of eight patients. (*Balagot, R. C., Reyes, R. M., and Sadove, M. S.: Antifoam Agents in Pulmonary Edema, J. A. M. A. 163: 630 (Feb. 23) 1957.*)

BLOOD ACTH LEVEL Utilizing a cross circulation technique with rats, it was demonstrated that a severe stress will produce a high secretory rate of ACTH for one to two hours. This was followed by a decline in ACTH release despite the presence of adequate pituitary stores. ACTH almost disappeared from body fluids six hours after a severe stress. After a milder stress a moderate rate of ACTH secretion was maintained during the twelve hour period studied. The fall in ACTH is not due to the pituitary inhibiting effect of adrenal cortical steroids. (*Brodish, A., and Long, C. N.: Changes in Blood ACTH Under Various Experimental Conditions Studied by Means of Cross Circulation Technique, Endocrinology 59: 666 (Dec.) 1956.*)

CARBON DIOXIDE Utilizing the denervated nictitating membrane of the cat as the test body, it was demonstrated that carbon dioxide is a potent stimulus for increasing the circulating sympatho-catechol amines. The threshold for adrenal stimulation was about 15 per cent carbon dioxide in alveolar air. The author points out the fallacy of using the blood pressure response to assess vascular smooth muscle action when carbon dioxide is administered. (*Tenney, S. M.: Sympatho-Adrenal Stimulation by Carbon Dioxide and Inhibitory Effect of Carbonic Acid on Epinephrine Response, Am. J. Physiol. 187: 341 (Nov.) 1956.*)

APNEA Respiratory acidosis is the chief factor responsible for the bradycardia of apnea, based on response of eleven dogs to apnea when breathing 100 per cent oxygen and also room air. Apnea was produced by *d*-tubo curarine. Bradycardia was observed after ninety seconds of apnea. This