

in *Patients with Cardiovascular Disease*, *Am. J. Med. Sc.* 233: 40 (Jan.) 1957.)

CARDIAC MASSAGE The anatomic changes produced by cardiac massage in 60 patients are described and categorized. Massage can result in injury to any or all portions of the cardiac tissues. Gross laceration of the heart occurred in 10 per cent. Cardiac injuries from massage are technical errors and are not due to duration of massage. Successful massage can exceed one hour without significant cardiac damage resulting. (Adelson, L.: *Clinicopathologic Study of Anatomic Changes in Heart Resulting from Cardiac Massage*, *Surg. Gynec. & Obst.* 104: 513 (May) 1957.)

CORONARY ANGIOGRAPHY A mixture of 90 per cent Hypaque, 25 per cent potassium citrate and saline was injected proximal to an occlusion of the ascending aorta. This made it possible to simultaneously arrest the heart and to obtain a coronary angiogram. The combination of drugs caused no apparent damage to the myocardium even though it remained in the heart during periods of cardiac arrest exceeding one hour. (Miller, E. W., and Kolff, W. J.: *Angiography of Coronary Arteries in Dogs*, *Cleveland Clinic Quarterly* 24: 123 (April) 1957.)

CARDIAC ARREST Potassium chloride seemed to be as effective as potassium citrate in producing cardiac arrest, thus the potassium ion is responsible for this effect. Citrate without potassium sometimes produced ventricular fibrillation probably as a result of the binding of calcium. An unusual type of 2:1 atrio-ventricular block was found when sodium citrate so prolonged Q-T intervals that alternate P waves occurred before repolarization of the ventricular myocardium was completed. (Kolff, W. J., and others: *Demonstration of Role of Potassium and Citrate Ions Under Conditions of Elective Cardiac Arrest for Open-Heart Operation*, *Cleveland Clin. Quart.* 24: 128 (April) 1957.)

CARDIAC ARREST Seven cases of cardiac arrest under trichloroethylene anesthesia were reviewed. The employment

of alternate agents whenever possible is recommended. (Norris, W., and Stuart, P.: *Cardiac Arrest During Trichloroethylene Anesthesia*, *Brit. M. J.* 1: 860 (April 13) 1957.)

CARDIAC ARREST The records of 8 patients who had cardiac arrest during anesthesia were studied. All had thoracotomy and cardiac massage. Four survived to leave the hospital perfectly well. All had multiple drugs and sedatives. Cardiac arrest is believed to result from (1) hypoxia with starvation of myocardium; (2) administration of drugs or anesthetics that poison the heart; or, (3) a combination of these. (Sharpe, G. P., Whitaker, H. T., and Parson, W. H.: *Clinical Problem of Acute Circulatory Failure*, *Surg. Gynec. & Obst.* 104: 535 (May) 1957.)

HEART BLOCK Heart block treated with sodium lactate may go on to more serious arrhythmia. Of 12 patients given 0.5 or 1.0 M sodium lactate, 6 developed ventricular tachycardia on 10 occasions. The magnitude of increase of the heart rate suggests that the uptake and utilization of the lactate by the myocardium promotes myocardial alkalosis and altered irritability. Molar sodium lactate is less efficacious and more hazardous than isopropyl-norepinephrine in treating this condition. (Murray, J. F., and Boger, S. H.: *Ventricular Arrhythmias After Intravenous Sodium Lactate in Heart Block*, *Circulation* 15: 547 (April) 1957.)

DIPIPANONE Dipipanone, which is the piperidino analogue of methadone, has been used for 18 months as a supplement in anesthesia for general surgical operations, thoracic operations and as an analgesic for relief of pain in labor with a minimum of undesirable side effects. (Coleman, D. J., and others: *Dipipanone Hydrochloride as an Adjunct to Anesthesia in Obstetrics and Surgery*, *Brit. M. J.* 1: 1092 (May 11) 1957.)

BUTHALITONE The usual nitrous oxide, oxygen and trichloroethylene anesthesia for short cases in the outpatient department was replaced by the use of Buthalitone sodium (10 per cent solution-11 mg. per kg. of body weight) with the