cases a mixture of 98 per cent oxygen and 2 per cent carbon dioxide was used. In the first series carbon dioxide tension is maintained near normal. The fall in *p*H was consistent with the development of metabolic acidosis. The addition of carbon dioxide during perfusion superimposes a respiratory acidosis on top of the metabolic acidosis. Some patients had low P_{CO_2} levels presumably due to hyperventilation. Even in those patients with a P_{CO_2} of less than 20 mm. Hg, no electroencephalographic abnormalities were noted. (*Viles, P. H., and others: Effect of Two Per Cent Carbon Dioxide on pH and P_{CO_2} During Extracorporeal Circulation, J. Thoracic & Cardiovasc. Surg. 39: 619 (May) 1960.*)

WHOLE BODY PERFUSION During high flow, normothermic whole body perfusion, studies were made of certain hemodynamic and metabolic variables in 3 patients. At the outset of perfusion, mean arterial pressure was subnormal and rose gradually with an increase in the peripheral vascular resistance. Steady levels of venous pressure were noted. The partial pressure of carbon dioxide was maintained at a lower than normal level. The system of perfusion used caused no significant increase in metabolic acidosis over that seen during pre-perfusion anesthesia. Oxygen consumption was within normal limits for anesthetized man. (*McGoon, D. C., and others: Physiologic Studies During High Flow, Normothermic, Whole Body Perfusion, J. Thoracic & Cardiovasc. Surg. 39: 275 (March) 1960.*)

EXTRACORPOREAL CIRCULATION Three hundred intracardiac operations were performed with extracorporeal circulation. In 262 cases, cardiac arrest was produced by injection of acetylcholine into the coronary system. Cyclopropane induction is followed by ether anesthesia. Tracheotomy is rarely performed in patients with pulmonary hypertension since pharyngeal secretions enter the lungs around the tube and 90 per cent of the respiratory resistance is due to organs below the cricoid cartilage. In view of the importance of the larynx for the cough reflex, tracheotomy is used only in patients who are too weak for active expectoration. About 2,500 cc. of blood/square meter of body surface are circulated in one minute. Postoperative fluids are limited in the first 24 hours to 250 cc. or less for children, and to 500 cc. for adults. This is believed to reduce the incidence of cerebral and pulmonary edema. (*Beyer, H. A.: Anesthesia for Open Heart Operations Using Heart Lung Machine, Der Anaesthesist 9: 117 (April) 1960.*)

CARDIAC WOUNDS One hundred cases of penetrating injury to the myocardium are reported. The most urgent problems were hypotension due to loss of blood, cardiac tamponade due to hemopericardium, and hypoxia due to pneumothorax or hemothorax. Cyclopropane, with or without other anesthetics, was used in 74 cases because of the quick, quiet induction it afforded. Intubation of the trachea was done as soon as possible to assist respiration, and then thoracotomy in order to relieve cardiac tamponade or to stop hemorrhage. (*Schaefer, H. C., and DeVault, M.: Anesthetic Management of Penetrating Wounds of Heart, J. A. M. A. 172: 1913 (April 23) 1960.*)

HEMORRHAGE AND HEALING Following acute hemorrhage, there is delayed wound healing. Restoration of normal blood volume reduces but does not prevent the delay. Denervation of the wounded area eliminates the delay in healing. It is postulated that local vasospasm persists and prevents normal healing; this is eliminated by denervating the area. The hemoglobin level has little influence on wound healing; restoration of blood volume by use of plasma is satisfactory. This paper is not concerned with the other physiological functions of hemoglobin. (*Sandberg, N., and Zederfeldt, B.: Influence of Acute Hemorrhage on Wound Healing in Rabbit, Acta chir. scandinav. 118: 367 (April) 1960.*)

ECG AND VALSALVA MANEUVRE In 209 demonstrably healthy subjects, the Valsalva maneuvre was performed at 40 mm. Hg for 10–12 seconds, while recording the electrocardiogram. In 22.5 per cent of the cases abnormalities developed. This is due to a low cardiac output with minimal coronary artery perfusion. (*Schaftel, N., and others: Electro-*