

content can be gained from determinations of hemoglobin, hematocrit and red blood cell count. Operative and postoperative complications and fatalities might be reduced if blood volume deficits were recognized and corrected. Routine blood volume determinations in hospital laboratories is not a formidable procedure. (Williams, W. T., and Parsons, W. H.: *Indications for Blood Volume Determinations in Major Surgical Procedures, Surg. Gynec. & Obst.* 106: 135 (April) 1958.)

**SHOCK** Using the isolated intestine, the author showed the presence of renin in the blood of the majority of animals after blood loss; renin was not detected after blood loss in the blood of animals whose kidneys had been removed. After removal of the kidneys the animals tolerated blood loss badly, showing weak compensation as compared with control animals. In compensation for blood loss the author attaches definite importance to a hypertensive factor of renal nature and calls the factor renin; nevertheless he stresses that he has not solved the problem of the nature of this substance. (Brusilovs-Kaya, D. A.: *Role of Kidneys in Compensatory Reactions of Body to Blood Loss, Arkh. Pat.* 18: 76, 1956.)

**GAS PERFUSION** Rabbit heart and cat tibialis muscle were maintained in good condition and in an active state for 3 to 4 hours by the intravascular perfusion of these tissues with warm, moist oxygen containing 5 per cent carbon dioxide. A pressure of 120 mm. of mercury was used to displace fluid from the blood vessels. Once gas had made its way into the veins the supply pressure was maintained at 80 mm. of mercury. (Burns, B. D., Robson, J. G., and Smith, G. K.: *Surgical of Mammalian Tissues Perfused with Intravascular Gas Mixtures of Oxygen and Carbon Dioxide, Canad. J. Biochem. & Physiol.* 36: 499 (May) 1958.)

#### FETAL ELECTROCARDIOGRAPHY

Fetal electrocardiographic tracings using the abdominal leads only do not permit identification of the ST segment and T wave deflection. When abdominal, paired with intrauterine leads were used, more in-

formation was obtained permitting interpretation of fetal tracings as related to fetal distress. Further evaluation and standardization of uncomplicated fetal electrocardiographic tracings are needed. (Kaplan, S., and Tojama, S.: *Fetal Electrocardiography, Obst. & Gynec.* 11: 391 (April) 1958.)

**FETAL LIFE** Employing a Grass channel electroencephalograph, abdominal leads, lumbosacral leads and two arm leads, the author has recorded the fetal electrocardiogram in order to determine fetal life. The method has proved of value as early as the eighteenth week. This method will also be useful in determining the relationship between increased intracranial pressure and maternal anesthesia to fetal anoxia. (Miller, M. L., and others: *Determination of Fetal Life by Electrocardiography, Obst. & Gynec.* 11: 398 (April) 1958.)

**HEMODYNAMICS** Seven dogs were prepared with an arteriovenous fistula between the femoral artery and vein. The size of the fistula was regulated by a screw clamp on the large Tygon tube connecting the above vessels. When the clamp was open cardiac output increased from 16 to 130 per cent. Mean arterial blood pressure remained unchanged or decreased 10-20 mm. of mercury. Coronary sinus blood flow and cardiac work increased with all fistulae. Effect on the heart rate was variable. There was an increase in the cardiac oxygen consumption. The increase of the coronary blood flow was due to a decrease in the resistance of the coronary bed. (Wegria, W., and others: *Effect of Arteriovenous Fistula on Mean Arterial Blood Pressure, Coronary Blood Flow, Cardiac Output, Oxygen Consumption, Work and Efficiency, Am. J. Physiol.* 193: 197 (April) 1958.)

**ETHER** Ballistocardiograms showed evidence of myocardial depression by ether in 4 healthy, anesthetized, young male volunteers. (Malt, R.: *Depressant Effect of Ether on Heart, Am. Heart J.* 55: 522 (April) 1958.)

**OPEN HEART OPERATIONS** Hemodynamic studies in 12 consecutive patients