

TRANSFUSION EQUIPMENT The clinical experience of four years use of blood stored in plastic bags is presented. The posttransfusion survival of erythrocytes was increased as compared with blood processed in conventional glass containers. The incidence of bacterial contamination and pyrogenic reaction was low. (Walter C. W., Button, L. N., and Ritts, R. E.: *Evaluation of Human Blood Processed in Plastic Transfusion Equipment, Surg. Gynec. & Obst.* 101: 365 (Sept.) 1957.)

SERUM SODIUM An unselected series of patients with abnormal serum sodium concentrations was reviewed. Abnormal concentrations do not represent specific syndromes or collection of syndromes but rather a manifestation of the reciprocal relationship existing between total body water and total body electrolyte. (Mason, E. E., and Dryer, R. L.: *Implications of Abnormal Sodium Concentration, Surg. Gynec. & Obst.* 101: 273 (Sept.) 1957.)

OXYGEN SATURATION A simple, rapid and accurate method for the spectrophotometric analysis of the per cent of HbO₂ in hemolyzed blood unexposed to air is described. The method is applicable to standard equipment, such as the Beckman DU and the Bausch & Lomb Spectrotonic 20 spectrophotometers. (Gordy, E., and Drabkin, D. I.: *Spectrophotometric Studies, XVI. Determination of Oxygen Saturation of Blood by Simplified Technique Applicable to Standard Equipment, J. Biol. Chem.* 227: 285 (July) 1957.)

SHOCK Experimental analysis of the genesis of shock associated with liver damage demonstrated the significant factor to be a decrease in circulating blood volume due to bleeding into the damaged liver. Factors such as splanchnic pooling, elaboration of VDM, bacteria, and toxins did not appear to play a significant role. (Lichtenstein, I. L., Pops, M. A., and Schimmel, I.: *Experimental Study of Liver Necrosis and Shock, West. J. Surg.* 65: 241 (July-Aug.) 1957.)

SHOCK Acute adrenal cortical insufficiency may be the causative factor of

shock which does not respond to adequate treatment with blood, fluids, electrolytes and vasopressors. Persistent hypotension which develops during surgery or in the immediate postoperative period, particularly in the patient with previous adrenal disease such as infection, neoplasm or idiopathic atrophy, should suggest this diagnosis. Adequate treatment with hydrocortisone will produce dramatic improvement. Dosage schedules should provide a high level of circulating hormone for several days following the crisis, followed by a gradual tapering off to maintenance status. (Adams, R., and Siderius, N.: *Postoperative Acute Adrenal Cortical Insufficiency, J. A. M. A.* 165: 41 (Sept. 7) 1957.)

SHOCK OF CORONARY OCCLUSION The severe shock of acute coronary occlusion has been treated successfully with a rapid infusion of cold plasma (250 cc. given intravenously at a rate of 60 to 80 cc. per minute, the plasma being at a temperature of 4 to 6 C.). Reflex stimulation of the heart by the cold infusion is thought to contribute to the response. (Vogelsang, A.: *Rapid Cold Plasma Infusion for Severe Shock (Peripheral Failure) Following Coronary Occlusion, Canad. M. A. J.* 77: 232 (Aug. 1) 1957.)

HYPOTENSION Two case reports show that "relative hypotension" in patients with advanced arteriosclerosis of the carotid and basilar arteries cause focal neurologic symptoms. These symptoms could be reversed to normal by the use of vasopressor agents and by maintaining adequate cerebral blood flow in the sclerotic cerebral vessels. Clinical implications of these studies are discussed in detail. (Shanbrom, E., and Levy, L.: *Role of Systemic Blood Pressure in Cerebral Circulation in Carotid and Basilar Artery Thromboses, Am. J. Med.* 23: 197 (Aug.) 1957.)

HYPOTHERMIA Hypothermia was produced in dogs by circulating, oxygenating and refrigerating venous blood in a small, plastic pump-oxygenator. The bypassed, contracting, hypothermic heart could be safely deprived of coronary flow