

of all units of stored blood contain bacteria. Overload reactions may develop due to overzealous transfusion. Plasma transfusion reactions and those due to leuco-agglutinins and to allergies may appear. Too many patients are given single pint transfusions. (*Hoxworth, P. I.: Physicians' Responsibility in Blood Transfusion, Surg. Gynec. & Obst. 110: 237 (Feb.) 1960.*)

PLASTIC TUBING Some brands of polyvinyl chlorides interfere with cardiac contraction. This observation, made during perfusions of isolated rat hearts, may be of some clinical value, since plastics are often used in intravenous sets and extracorporeal pumps. (*Meyler, F. L., Willebrands, A. F., and Durrer, D.: The Influence of Polyvinyl Chloride (PVC) Tubing on the Isolated Rat's Heart, Circulation Res. 8: 44 (Jan.) 1960.*)

HEMOLYSIS Small amounts of bank blood refluxing from filter chambers into solutions being administered following transfusion may undergo hemolysis. Hemolysis is promoted by increased temperature, older blood, more dilute reflux dilutions and length of time the mixture stands. More hemolysis occurred in isotonic solutions of 4.3 per cent dextrose and 0.18 per cent sodium chloride than with five per cent dextrose solutions. (*Noble, T. C., and Abbott, J.: Haemolysis of Stored Blood Mixed with Isotonic Dextrose-Containing Solutions in Transfusion Apparatus, Brit. Med. J. 2: 865 (Oct. 31) 1959.*)

BLOOD VOLUME Considerations of variation in blood volume relative to body weight exists in normal patients—chiefly due to variances in their body fat. Cathectic individuals without advanced cancer, renal disease, hepatic disease or chronic infection may have normal or supernormal plasma volume associated with subnormal hematocrit and hemoglobin concentration. Correction of anemia by blood transfusion in the presence of normal or supernormal blood volume may be dangerous—leading to pulmonary edema or death. (*Pender, J. C. Jr., and others: A Consideration of Indications for Preoperative Transfusions Based on Analysis of Blood Volumes and Circulatory Proteins in Normal and Malnourished Patients*

With and Without Cancer, Ann. Surg. 151: 303 (March) 1960.)

SERUM HEPATITIS Serum hepatitis has been reported following the use of fibrinogen in the treatment of hypofibrinogenemia. Fibrinogen should not be used in hypofibrinogenemia unless bleeding is severe enough to warrant the calculated risk. Prophylactic injections of gamma globulin should be seriously considered. (*Zaino, E. C.: Homologous Serum Hepatitis Following the Administration of Fibrinogen, Obst. & Gynec. 15: 404 (March) 1960.*)

LEVARTERENOL NECROSIS The subcutaneous infiltration of 250 cc. of solutions containing 8 to 32 mg. levarterenol/liter for two hours produced sloughs of the skin of the abdomen of rabbits. Data showed that levarterenol-phenolamine solutions containing 2.5 to 10 mg. of phenolamine produced no slough. Sloughs were reduced with mixtures containing 16 and 32 mg. levarterenol and 1 mg. phenolamine. (*Zucker, G., and Eisinger, R. P.: Prevention of Levarterenol-Necrosis in Rabbits by Use of Levarterenol-Phenolamine Mixtures, Proc. Soc. Exp. Biol. & Med. 103: 260 (Feb.) 1960.*)

STOMACH INFLATION An unconscious patient was given 4 to 6 liters of oxygen by nasal catheter. Within one hour she developed perforation of the stomach near the cardia with massive pneumoperitoneum but recovered following surgery. Similar cases are quoted, including a fatal case following inadvertent insertion of an endotracheal tube in to the esophagus. (*Kootz, F.: Perforation of the Stomach Due to Endonasal Oxygen Administration, Der Anesthetist 9: 22 (Jan.) 1960.*)

POSTOPERATIVE EKG In an unselected series of 496 surgical patients there were 12 (2.4 per cent) myocardial infarctions postoperatively. Since all infarctions occurred in patients over 50 years old the incidence in this group was 4.5 per cent. Ten of the 12 patients preoperatively had hypertension, peripheral vascular disease and/or diabetes mellitus, precursors of coronary heart disease. Six (50 per cent) of the infarctions would

not have been diagnosed except for this study. Only seven of the 12 patients had significant hypotension during or after operation. Eleven patients received general anesthesia. There were only two deaths. (*Driscoll, A. C., and others: Myocardial Infarction and Other Electrocardiographic Changes in the Post-operative Period, Bull. Tufts-New England Medical Center 6:1 (Jan.-Mar.) 1960.*)

CHOLINESTERASE The activity of the serum cholinesterase in 304 patients with various diseases including mental illness, Q-fever, infectious hepatitis and cardiovascular insufficiency was studied. A definite fall in cholinesterase activity was found in many pathological processes which was not specific for a particular nosologic form but depended upon the severity and duration of the pathological process. A correspondence was recorded between the increase of cardiac decompensation and depression of the enzyme activity. The cholinesterase activity depends chiefly upon the hepatic function as was particularly clearly seen in patients with infectious hepatitis. (*Salyaev, V. N., Stolyarchuk, A. A., and Ushakov, G. K.: The Cholinesterase Activity of the Blood Serum in Certain Pathologic Processes, Vrach. Delo 9: 903, 1958.*)

ANALGESIA FOR BURNS Analgesics have been administered to 39 patients during 107 burn dressings. Combinations of mepazine (intramuscularly or by mouth) with meperidine and amiphenazole (intramuscularly or intravenously) have been tried. The combination of meperidine and amiphenazole given intravenously gave the best results. One hundred to 150 mg. of meperidine were given for the age groups 4 to 14 years and 150 to 250 mg. for older patients. While this regimen proved effective for adults, it was less effective in children. Respiratory depression was noted in some cases, but no immediate ill effects were noted from this. (*Davies, M. R.: Analgesia for Burns Dressings, Lancet, 2: 710 (Oct. 21) 1959.*)

INTRATHECAL PHENOL Phenol, 10 to 25 per cent solution, dissolved in Myodil or glycerin, has been injected intrathecally in

patients with disseminated sclerosis, myotrophic lateral sclerosis, and other central nervous system diseases. Pain, spasticity, and muscle spasms have been relieved in all patients. Spasticity and spasms have recurred in some patients, but only in one patient has the return been severe enough to warrant another injection. (*Nathan, P. W.: Intrathecal Phenol to Relieve Spasticity in Paraplegia, Lancet 2: 1099 (Dec. 19) 1959.*)

INTRATHECAL PHENOL Dry crystalline phenol has been dissolved in Myodil to prepare 5 to 20 per cent solutions. An alternate solution of phenol crystals in glycerin in five per cent concentration has been used. The substances have been injected intrathecally in 32 patients with reflex spasms and spasticity. While the results have proven to be very effective in the relief of spasms, some patients have noted muscle weakness and sensory loss. It was least effective in long-standing quadriplegics with contractures and is advised only for bedridden patients. (*Kelly, R. E., and Gautier-Smith, P. C.: Intrathecal Phenol in the Treatment of Reflex Spasms and Spasticity, Lancet 2: 1102 (Dec. 19) 1959.*)

PROSTATECTOMY Patients needing prostatectomy are particularly susceptible to the toxic effects of many anesthetic drugs—for example, persistent curarization, apnea, or postoperative respiratory impairment with resultant chest complications. They often have respiratory or cardiovascular disease, obesity, or disturbances of fluid balance. They usually have atheromatous changes in the vascular system and are intolerant of both blood-loss and rapid or excessive blood transfusion. The anesthetic of choice for patients to have prostatectomy is premedication with atropine and morphine or meperidine, followed by a caudal block using a maximum of 15 to 25 ml. of 1.5 per cent lignocaine with 1:80,000 epinephrine. This is followed by a slow intravenous injection of 50 mg. meperidine, chlorpromazine 25 mg., and promethazine 25 mg. Thiopental 100 to 200 mg. is then given intravenously, an endotracheal tube is inserted, and nitrous oxide-oxygen administered. Muscular relaxation was obtained with either tubo-curare or gallamine. By this method there were only two deaths in