

the gravimetric method. (Dilute glucose solutions are used instead of saline to moisten laparotomy pads.) (*Le Veen, F. H., and Rubricius, J. L.: Continuous, Automatic, Electronic Determinations of Operative Blood Loss, Surg. Gynec., & Obst. 106: 368 (Mar.) 1958.*)

BLOOD TRANSFUSION Labelled plasma protein molecules were obtained and used in the study of protein metabolism in dogs. It was found that after a blood transfusion renewal of the proteins of plasma, liver, kidneys, hemopoietic organs and brain is accelerated. The proteins of the transfused plasma leave the vascular bed faster in the case of posthemorrhagic transfusion than in the presence of plethora. By intravenous administration of labelled plasma it was shown that transfusion increases the permeability of the vascular wall. Blood transfusion substantially increases the rate of absorption of labelled proteins from the peritoneal cavity (after intraperitoneal introduction of labelled plasma). (*Messineva, N. A.: Use of Tracer Elements in Study of Processes Following Blood Transfusion, Trud. Pervoi Zakavk. Konferentsii po Med. Radiol. p. 197, 1956.*)

BLOOD TRANSFUSION Although the transfusion of blood may prove life-saving to the surgical patient, its casual or indiscriminate use should be avoided. The mortality rate attributable to transfusion is about one per five thousand units. Major complications include bacterial contamination, transmission of disease, hemolytic reactions, allergenic reactions, circulatory overload, and hemorrhagic disorders. (*Dripps, R. D.: Physician's Responsibilities Toward Blood Transfusion, South. M. J. 51: 141 (Feb.) 1959.*)

BLOOD TRANSFUSION Blood transfusions prepared without buffer (but using ion exchanging adsorbents) have a higher replacement value than citrated blood. In addition they have a beneficial influence on hemopoiesis even in those cases in which repeated transfusions of citrated blood do not produce the desired therapeutic effect. (*Abdullaev, G. M.: Experience in Clinical Use of Blood Transfusions*

Prepared Without Buffer But with Use of Ion Exchangers, Azerbaidzh. Med. Zh. 9: 64, 1956.)

TRANSFUSION The great hazards of blood transfusions lie in their excess or inadequate use; in their being used in lieu of proper diet; in their being used to support a patient who presents a clear-cut indication for surgical intervention to arrest bleeding. The problems of metabolic hazards such as those of citrate intoxication and of potassium or ammonium retention assume real significance in the face of a failing liver or kidney. The initiation of additional clotting problems, especially those associated with activation of fibrinolysins, must be constantly borne in mind. (*Guyon, V. L., and Reynolds, J. T.: Use and Abuse of Blood Transfusions, S. Clin. North America 38: 19 (Feb.) 1958.*) Editor's note: The authors recommend that a house officer be assigned to manage blood replacement in the operating room. Since the anesthesiologist knows more about the patient than anyone else, it would seem logical for the house officer to be supervised by the anesthesiologist.)

CITRATE IN TRANSFUSION Overloading and failure of the dog heart during rapid intravenous transfusion is not a function of transfusion *per se*, but of the amount of citrate simultaneously given. Blood without citrate can be safely transfused at rates many times greater than can citrated blood, not only intravenously but also intra-arterially. The advantage of intra-arterial transfusion in the treatment of shock and hemorrhage lies only in the increased rate of citrate filtration into the interstitial fluid compared with the rate in intravenous infusion. The effect of citrate during transfusion can be safely counteracted by the simultaneous intravenous administration of calcium and procaine. (*Firt, P., and Hejhal, L.: Treatment of Severe Hemorrhage, Lancet 2: 1132 (Dec. 7) 1957.*)

PLASTIC BLOOD BAGS Plastic bags manufactured for the purpose of storing and transfusing blood were in no respect superior to conventional glass bottles.