

HEPATITIS FROM STORED PLASMA

A prospective, controlled study of the incidence of hepatitis following transfusion of commercial pooled plasma, stored for at least six months in the liquid state at 30–32 C, was performed, using 5 per cent albumin as a control solution. Hepatitis developed in 12 of 120 plasma recipients. None of the 46 control subjects developed hepatitis. Fifty per cent of the hepatitis cases were icteric. All instances of hepatitis were confirmed by liver biopsy. The probability that 122 cases of hepatitis found in the plasma group could have occurred by chance was extremely low. The incidence of hepatitis observed among co-recipients of one plasma lot provided strong supporting evidence that the disease was transmitted by transfusion. (Redeker, A. G., and others: *A Controlled Study of the Safety of Pooled Plasma Stored in the Liquid State at 30–32° C for Six Months, Transfusion* 8: 60 (March) 1968.)

STORED PLASMA VS ALBUMIN In an editorial accompanying the article by Redeker *et al.* about the incidence of hepatitis following transfusion of stored plasma, physicians are cautioned about the use of old, pooled plasma. While the use of locally prepared, stored liquid plasma has several economic advantages, they do not outweigh the hazard from the use of such plasma. In addition to the possibility of inducing hepatitis, pooled plasma may contain high levels of anti-A and anti-B antibodies even after storage at room temperature for long periods, and is frequently associated with fever, chills, and allergic reactions during administration. Albumin rather than liquid plasma should be used as a plasma volume expander. (Committee on Plasma and Plasma Substitutes of the Division of Medical Sciences, National Research Council: *Statement on Normal (Whole, Pooled) Human Plasma, Transfusion* 8: 57 (March) 1968.)

DEXTRAN 70 Anaphylactoid reactions occurred in two of 84 hemodynamically stable patients given dextran 70, an incidence of 2.4 per cent. These reactions developed immediately after intravenous infusion of small amounts of dextran 70. The reactions were characterized by generalized subjective dis-

comforts rapidly followed by severe gastrointestinal disturbances and hypotension. The true nature of these reactions and the role and source of prior sensitization is unknown. The infusion of dextran 70 may provoke life-threatening reactions, especially in unconscious patients and in those with preexisting hypotension or intra-abdominal pathologic conditions. Treatment consisted of oxygen by face mask and 50 mg diphenhydramine hydrochloride (benadryl) and 15 mg of mephentermine sulfate given intravenously. (Brisman, R., and others: *Anaphylactoid Reactions Associated with the Clinical Use of Dextran 70, J.A.M.A.* 204: 824 (May) 1968.)

Respiration

PULMONARY FUNCTION Twelve subjects were subjected to hyperbaric pressures in a dry chamber as follows: (1) 24 hours' exposure to 35 feet water pressure; (2) half- to two-hour periods of exposure to 100–165 feet water pressure; (3) stage decompression at 35 feet and 10 feet water pressure, including one hour of breathing pure oxygen prior to return to ambient pressure. Pulmonary function was measured at frequent intervals with the flow-volume technique (Wedge spirometer). Data about vital capacity, inspiratory capacity, expiratory reserve volume, tidal volume, and maximum inspiratory and expiratory flow rates obtained at low pressures were compared with those obtained during acute exposure to the higher pressures. The maximal inspiratory flow rate showed a significant reduction after the 24-hour exposure to a pressure equivalent to 35 feet of water. (Dougherty, J. H., Jr., and Schaefer, K. E.: *Pulmonary Function During Saturation-Excursion Dives Breathing Air, Aerospace Med.* 39: 289 (March) 1968.)

DISTRIBUTION OF INSPIRED GAS

Nitrogen washout curves obtained from normal subjects and from patients with obstructive airway disease were simulated with an analogue computer which described the washout in terms of six equally ventilated compartments. Changes in distribution of inspired gas occurred on change of body position and during voluntary change in inspiratory flow