mitted a normal platelet life-span pattern. The method of assessing *in-vivo* viability of the frozen and thawed, glycerol-treated platelet concentrates was the life span of the platelet concentrates labeled with Cr^{51} before glycerol addition. (*Cohen, P., and Gardner, F. H.: Platelet Preservation. II. Preservation of Canine Platelet Concentrates by Freezing in Solutions of Glycerol Plasma, J. Clin. Invest. 41: 10 (Jan.) 1962.*)

AORTIC OCCLUSION Experimental studies in dogs showed that spinal fluid pressure rose at the time of distal thoracic aortic occlusion to equal the pressure in the distal aorta. After one hour of occlusion there was 100 per cent incidence of paraplegia. (*Blaisdell, F. W., and Cooley, D. A.: Mechanism of Paraplegia after Temporary Thoracic Aortic Occlusion and its Relationship to Spinal Fluid Pressure, Surgery 51: 351 (Mar.) 1962.*)

BANK BLOOD ACD solution immediately increases the plasma citrate concentration and lowers the *p*H of the blood to 6.8. During storage there is an increase in blood ammonium, plasma potassium, plasma hemoglobin, phosphate, lactate, and pyruvate, and a further reduction of the *p*H to approximately 6.5 by the end of the second week of storage. Because large amounts of blood with such abnormal electrolyte concentrations may be hazardous to recipients, attempts have been made to restore this blood to approximate biochemical normalcy. This has been accomplished by passing the blood over a combination of anion and cation exchange resins in a single column (monobed). The time of passage of the blood ranged from 90 to 180 minutes, at the end of which time the accumulated anions and cations had been removed and the *p*H raised to near normal. (*Sandler, J. L., and others: Restoration of Stored Bank Blood to Biochemical Normalcy, J.A.M.A. 179: 201 (Jan. 20) 1962.*)

BANK BLOOD Bank blood ordinarily is preserved with a solution containing citric acid, sodium citrate, and dextrose (ACD). A substitute solution was tried, containing trisodium citrate, monobasic sodium phosphate and dextrose (CPD). This solution is less acid, and contains 20 per cent less citrate. It was found to provide a slightly longer period of red cell survival. It does not prevent the other changes which occur in bank blood due to red cell metabolism: increasing acidification and hemolysis; increased plasma levels of potassium, ammonium, lactate and pyruvate. (*Schechter, D. C., and Swan, H.: Biochemical Alterations of Preserved Blood, A.M.A. Arch. Surg. 84: 269 (Mar.) 1962.*)

BLOOD PLATELETS Replacement of viable platelets by fresh, whole blood administration is wasteful of blood donors and frequently is dangerous because of overloading the circulation. A platelet transfusion derived from one 500 ml. blood donation can be administered in a 30 ml. volume. In addition, separate storage of viable red blood cells and viable platelets from fresh, platelet-poor plasma will achieve the goal of blood-component therapy. Simple refrigerator storage of platelets at 4° C. in any concentrated form for use on demand is not feasible. Red blood cell experience indicates that the addition of nucleosides or other nutrients is not likely to extend the 4° C. shelf-life of platelets. Preservation of platelets by freezing methods is likely to provide the only possible means for their banking. Use of any criteria other than life-span measurement in platelet preservation procedures is to be discouraged, since clot retraction and thromboplastic function may be retained by platelets which are incapable of survival in the circulation. (*Cohen, P., and Gardner, F. H.: Platelet Preservation I. Preservation of Canine Platelets at 4° C., J. Clin. Invest. 41: 1 (Jan.) 1962.*)

RESIN TREATED BLOOD The changes which occur in citrated blood are undesirable. These include increased acidity and hemolysis, and increased plasma potassium, ammonium, lactate, and pyruvate. Blood clotting may be prevented by decalcification of blood, using an ion-exchange resin. The principal change noted after storage of resin-decalcified blood is a greater accumulation of ammonium. It is not acid, and hypocalcemia in the recipient is less pronounced. Resin treated blood may be preferable for all patients except those who have liver damage. (*Schechter, D. C., Paton,*