

activity in the hemophiliac-like blood, and in combinations of the latter with normal blood, demonstrated only a slight consumption of prothrombin in the course of the clotting process, it is concluded that the effect of this inhibitory agent was to impede the conversion of thromboplastinogen to thromboplastin. An explanation is thus afforded for the failure of certain patients with hemophilia and hemophiliac-like disorders to respond satisfactorily to transfusion therapy or the administration of antihemophiliac globulin.

C.P.E.

RELATION OF COMPLEMENT TO BLOOD COAGULATION. *F. D. Mann and M. Hurn.* From the Division of Clinical Laboratories, Mayo Clinic, Rochester, Minnesota. *Proc. Soc. Exper. Biol. & Med.* 67: 83-85, 1948.

The role played by complement in the conversion of prothrombin to thrombin was studied by means of one and two-stage assays of thrombin production, after recalcification and addition of thromboplastin, in plasma freed of complement activity by aging, by treatment with zymine and with ammonia. It was concluded that inactivation of complement by these methods prevents thrombin formation without significantly impairing the activity of prothrombin.

C.P.E.

THE EFFECT OF HEPARIN AND DICUMAROL ANTICOAGULANT THERAPY UPON THE ERYTHROCYTE SEDIMENTATION RATE. *S. W. Cosgriff.* From the Department of Medicine, College of Physicians and Surgeons, Columbia University, and the Presbyterian Hospital, New York City. *J. Clin. Investigation* 27: 435-438, 1948.

The influence of anticoagulant therapy on the suspension stability of red cells was studied in 10 subjects receiving heparin, 10 receiving dicumarol, and in 5 recipients of both drugs concurrently. It was determined that, in therapeutic dosages, heparin and dicumarol do not significantly alter the erythrocyte sedimentation rate and that the results of this test are therefore not invalidated by interference from the effects of these drugs.

C.P.E.

BLOOD PRESERVATION AND FRACTIONATION

BLOOD AND ITS DERIVATIVES. *S. T. Gibson.* From the Medical Clinic of the Peter Bent Brigham Hospital and the Department of Medicine, Harvard Medical School, Boston, Massachusetts. *New England J. Med.* 239: 544-556 and 579-589, 1948.

This article with its bibliography of 381 references serves as an excellent review of the large amount of work undertaken during the war years on blood preservation and the uses of its various products.

Some of the general topics dealt with are blood preservation, reactions to blood products (especially serum hepatitis), procurement and fractionation of plasma, therapeutic uses of albumin and other plasma components.

C.A.F.

BOOK REVIEWS

The Pathology of Nutritional Disease. By RICHARD H. FOLLIS, JR. Springfield, Ill., C. C. Thomas, 1948. pgs 276.

This is a beautifully printed and illustrated work in which the pathologic disturbances associated with various nutritional deficiencies are described. The book is divided into six sections dealing with dietary deficiencies in general, the essential elements, the essential amino acids, the fat and water soluble vitamins, the essential fatty acids, and the pathologic anatomy of specific tissues.

There are 791 references and 71 superb illustrations, both of gross and histologic material. There has

been need for such a carefully conceived work, and the book is recommended highly to nutritionists, internists, and pathologists.

WILLIAM DAMESHEK

El Diagnostico por la Puncion Canglionar, 1947. By G. FORTEZA BOVER. Valencia, Editorial Saber, 1948.

In Spanish, 146 pages, 55 figures in black and white.

In referring to the history of lymph node puncture, the author points out that although it had been recommended as a means of diagnosis in isolated cases since the beginning of the century, it had come into general use only following the publications of Ellis and Martin (1930-1934) in the United States, and of A. Pavlovsky of Buenos Aires (1933-34). Thereafter, well documented monographs by Lutrozzi, Weill, Stahel, Tischendorf, Leitmes and others appeared.

Utilizing the technic recommended by Pavlovsky, Forteza Bover presents his experience, beginning by describing in detail the cytomorphology of normal and hyperplastic lymphatic tissue. The disorders of lymphoid tissue are then described, beginning with the simple hyperplastic processes. There are excellent illustrative photomicrographs and colored plates.

In tuberculous adenitis, four stages are described: (1) initial tuberculous hyperplasia; (2) granulomatous transformation with necrosis and the presence of Langhan's giant cells with necrosis, (3) caseous necrosis and (4) purulent effusion. Careful descriptions of Boeck's sarcoid are given with figures illustrating the difficulties in differential diagnosis from tuberculous adenitis.

The author's studies of Hodgkin's disease are in agreement with those obtained by previous workers who have utilized similar diagnostic technics. In lymphosarcoma, the cytologic characters of tumor formation are well depicted. However, in the diagnosis of follicular lymphoblastoma, the author considers the cytologic picture as being nonspecific and requiring an open biopsy for a definite diagnosis.

The pictures obtained in metastatic malignancy are of great value and Stahel's descriptions of the cellular elements which permit diagnosis are followed.

This book is well presented with good documentation and some excellent color plates. There are some original observations in Boeck's sarcoid, and comprehensive and detailed studies of Hodgkin's disease. The book is recommended particularly to those who wish to become acquainted with the technic of and results obtained from lymph node puncture and study of the "adenogram."

ALFREDO PAVLOVSKY

New Staining Methods in Hematology, 1948. By J. GARCIA BLANCO AND G. FORTEZA BOVER. Valencia, Editorial Saber, 1948. In Spanish, 93 pages, 19 plates in color and 11 engravings in black.

The authors describe staining methods which were at first used histochemically but which were later applied to studies of the blood and bone marrow.

The various oxidase methods are described. The use of tetrabromophenolphthalein for staining hematopoietic tissues is described for the first time, used both singly and in combination with the peroxidase methods.

In the method which the authors call T.F.S. (Neosina), they utilize tetrabromophenolphthalein to retain the cellular structure of the various tissues. T.F.S. appears to react with the simple proteids and the prosthetic groups of the cellular structures, causing color combinations which depend upon the isoelectric point of the substrate. They also use the combined method with eosin and methylene blue with which beautiful contrast pictures are obtained.

This book is carefully and clearly written with exact descriptions of the technics used and is exceptionally well illustrated. The excessive detail in the described technics is somewhat confusing to the uninitiated. For this reason, it is unfortunate that the authors did not complete their work by presenting a precise critique of the different staining technics, thus advising which of the methods used is of greatest application in a given instance.

ALFREDO PAVLOVSKY