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pernicious anaemia sera the extraction process described by Lau *et al* (1965) tended to give higher B_{12} values than those obtained when the extraction was carried out by deproteination at *p*H 5·6; he made no comment about other sera. Since he had previously found that extraction by deproteination gave recovery values of approximately 95% for cyanocobalamin added to serum (Rothenberg, 1963), he considered that it was unlikely that inefficient extraction could explain the lower B_{12} values obtained by his extraction process and suggested that the heating of serum at a low *p*H might release some substance which interfered with the binding between $^{57}CoB_{12}$ and serum. However, he assumed that recovery of cyanocobalamin added to serum can be equated with recovery of endogenous B_{12} from serum and this assumption remains unsupported.

Preliminary studies in which we have used the isotope method to assay the protein precipitate formed during the *L. leichmannii* extraction process suggest that for many sera appreciable amounts of B_{12} are left behind in this precipitate. We have noticed that when the two methods have given similar values for sera, little B_{12} can be recovered but when the two methods have given markedly different results for a serum the difference between the two results often equals the amount of B_{12} detected in the protein precipitate.

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who are accepted specialists in their particular aspect of this disease. The current opinions on clinical presentation, immunological problems, pathological anatomy, and general principles of therapy are discussed in detail.

Existing histological classifications, including those of Jackson and Parker, Lukes and Butler, and the recently modified Rye classification, are compared. In regard to correlation with prognosis, the limitations of the Jackson and Parker classification are emphasized, and, although the Rye classification is an improvement, confusion will still be experienced with some varieties. For instance, into what category will be placed the Lukes and Butler lymphocytic and/or histiocytic diffuse cases in which the 'histiocytic component varies widely from scattered individual histiocytes to a predominance of histiocytes with only a small component of residual lymphocytes'.

Use of the term 'histiocyte' causes considerable confusion to English pathologists. In accordance with Gaul's nomenclature, American authors use the term 'histiocyte', which is synonomous with 'clasmatocyte', for all reticuloendothelial cells other than the 'stem' cell which is synonomous with the 'reticulum' cell. In the English literature, 'stem' cells are regarded as more primitive reticulum cells and a 'histiocyte' refers to the epithelioid cell seen in cases of sarcoidosis or toxoplasmosis. The reader is confused by use of the expressions, 'the changes in the reticulum cells result in a progression of alterations from the moderate reactive cells to large bizarre diagnostic forms—they have been divided into three forms. In the first form the histiocytes are of the reactive type, the second type so carefully described by Sternberg and Reed, and the third type consists of the atypical cells found in Hodgkin's sarcoma'.

In general, the illustrations are excellent, but in Fig. 6-7 (p 139) and Fig. 6-8 (p 140), the captions are misleading and do not appear to correspond with the photographic details.

R. M. CROSS

ENZYME BIOCHEMISTRY OF THE ARTERIAL WALL AS RELATED TO ATHEROSCLEROSIS By Tibor Zemplenyi. (Pp. 273; 79 figures. 90*s*.) London: Lloyd-Luke Ltd. 1968.

This finely produced monograph is aimed at two types of research workers—the biochemist who may not be quite in touch with the medical problems involved in the study of arterial disease, and the medical biologist whose knowledge of biochemistry requires sharpening up. In Part One an exhaustive account is given of the enzyme activities found in normal vessel walls, and in Part Two the special problems of enzyme activity in relation to atherosclerosis are studied. Much of the work summarizes data previously published from the author's department in the Cardiovascular Research Institute in Prague and it is a great convenience to research workers to have all this important material brought together for them.

Although some histochemical observations and illustrations are included, the book is primarily concerned with chemistry in the test tube rather than on the microscopic slide.

This complex field is at the stage where a great deal of information concerning differences in enzyme activity between vascular lesions, normal arteries, and the arteries of animals undergoing various experimental manipulations is being accumulated, but it has not yet reached the position from which any clear pattern can be recognized or from which the future development of the work can be prophesied. Although of the greatest importance to research workers in arterial disease, there are as yet no clear-cut applications to clinical pathology.

T. CRAWFORD

AN INTRODUCTION TO HISTOCHEMICAL TECHNIQUE By J. D. Bancroft. (Pp. viii + 268; illustrated. 58*s*.) London: Butterworths. 1967.

It is emphasized both in the blurb and in the Preface that the publication of this book has been prompted by the increasing importance of histochemistry in the advanced histology examination of the Institute of Medical Laboratory Technicians. This emphasis on histology is shown in part by the fact that the first quarter of the volume is devoted to the very many different methods of preparing sections for many types of optical microscopic examination. Scholarly comments in an otherwise valuable practical discussion are probably made with an eye to the Institute's examination. But equally, the author's basis in histology is put to good advantage in that he gives histochemical methods which can be applied even to routine histological material as well as to the type of section generally preferred by histochemists.

Nearly half the book deals with the staining of structural components, namely, the nucleic acids, proteins, lipids, carbohydrate (including amyloid), and of pigments. About the last quarter deals with how to stain phosphatases, esterases, and oxidative enzymes, with brief mention of aminopeptidase, sulphatases, phosphorylase, and β-glucuronidase. For almost each technique the author gives details of a number of variants; he leaves it to the reader to choose which he prefers.

The histochemical emphasis is on how to stain for a given substance or enzyme. One limitation of this emphasis, however, is that staining methods are given, for example, for acid phosphatase but not for studying lysosomes. Morover, although the author claims, in the Preface, to attempt to give a simple explanation of the theory of each method, most readers who want to understand the theory will find that they will have to refer to one of the major books on histochemistry, such as that of Professor Pearse who wrote the Foreword to this handy, practical book.

L. BITENSKY

SYMPOSIUM ON DISORDERS OF CARBOHYDRATE METABOLISM

A symposium on 'Disorders of carbohydrate metabolism', which was part of the autumn meeting of the Association of Clinical Pathologists, will be issued as a separate supplement to the *Journal of Clinical Pathology*, and will go without further payment to all members of the Association who subscribe to the Journal. Other subscribers will be able to buy the symposium at a reduced rate. Prices will be announced in the next issue of the Journal.