Book reviews


This is an excellent book with a particular interest for pathologists. It will be a boon to aspirants for membership of the College of Pathologists, being far more than just a series of recipes. The writing is lucid and there is choice guidance to suitable further reading. Although Baker's Principles of biological microtechnique (1958) is amongst these, the authors in their chapter on the theory and practice of staining reveal perhaps too little influence of that fascinating and important book. Any reader who feels that the reference list is excessively Anglo-Saxon could reach to the other significant literature through the magnum opus of Herbert Harms (not quoted) Handbuch der Farbstoffe für die Mikroskopie (1963), Kamp-Lintfort.

In the next edition, which is surely certain, I hope the use of the Colour Index 2nd edition will be further explained so that its value can be more widely enjoyed. It would be a good thing if dyes were henceforth to be designated by their group number rather than their Colour Index number; the latter indicates the published formula but surely Methyl Blue is much more easily recognized as Acid Blue 93 than as 42780! Also, we can guess that Luxol Fast Blue MBSN of Messrs DuPont is the same or nearly the same as Methanol Fast Blue of Messrs I.C.I. Since they are both grouped as Solvent Blue 38, although the formula of Solvent Blue 38 has not yet been published and the dye therefore has no Colour Index number.

An interesting novelty in a publication from the Oxford Press appears in the reference lists. The names of the publishers of books have been dropped.

The quality of production is high and faults rare. One misprint was found (p. 366, step 3, saline instead of alcohol) and one mistake (p. 187, step 12 where blotting is suggested). Naturally one can hold different views; for example, I am convinced that van Gieson's stain (p. 167) should be flushed off smartly with absolute alcohol and all contact with water be avoided. Also, in the fixation of eyes for embedding in celloidin (p. 318), the use of buffered formalin is far better. The index is good but less perfect than the rest of the structure.

We have waited long for a new Carleton, and it has arrived as quite the best vade mecum for the pathologist; sensible and yet likeable, it is full and yet not dull. I commend it strongly to pathologists of all ages, because this is the kind of book to help the graduate toward a fuller understanding with his technical colleagues. This book is the splendid result of just such a cordial understanding.

A. C. LENDRUM


Now that the possibilities of cancer prevention are becoming more fully appreciated there is an increasing need for epidemiological studies which can help to identify the causative factors responsible for various types of tumour. This book is a useful contribution to the subject containing, as it does, a collection of papers by international contributors, but it is not a comprehensive review of the subject, and there are, for instance, no more than passing references to the important geographical variations in incidence of cancers of the lung, female breast, and cervix. Indeed the title is misleading because the book covers a wider field than it suggests. Carcinomas of the stomach and nasopharynx and Kaposi's sarcoma are each discussed in some detail and the clinical and pathological features are included. There is an especially interesting paper on the genetics of stomach cancer by McConnell. The section on Kaposi's sarcoma includes a paper on radiological investigations which, although interesting, does not seem relevant to the main theme.

The help in epidemiological studies which can be given by the pathologist is emphasized, and this will be facilitated by agreement on standardization of histological classifications.

Burkitt's tumor is dealt with in two good papers: one by Burkitt himself and the other by Epstein and his colleagues who discuss the possible role of the new herpetic-like virus which they have discovered. There are five short papers on cancer incidence in certain parts of the world ranging from Iceland to Singapore.

The last main section of the book consists of an interesting series of papers on the epidemiology of animal tumours. No direct links between animal and human tumours are suggested, but there is the suggestion of similar variations occurring between animal breeds and geographical locations as are found in man. Although, as Head points out in his paper, it is difficult to establish natural incidence as there is no veterinary Registrar General.

The book is well produced and easy to read, but some tables lack captions and regrettably there is no index.

M. J. T. ADAMS

METABOLIC DERANGEMENTS IN GASTROINTESTINAL SURGERY


The authors of this book have tried to write several books in one, and have not quite succeeded. Had they confined themselves to discussing the problems of diagnosis and management of metabolic complications of gastrointestinal surgery, the book could have been generally recommended; for example, the section on alimentary fistula is a model of its kind. In such parts of the book, which are illustrated by detailed case histories, Professor Brooke and Mr. Slaney have drawn on wide experience in patient care and in the teaching of surgery. These sections should be studied, and the advice followed by all surgeons who are concerned with more than operative technique.
However, the authors have tried to provide a guide to metabolic biochemistry, and also a selected textbook of metabolic diseases. Because of the limited space available this has led to over-simplification, and such topics as liver function tests, plasma protein synthesis, and acid-base balance would better be studied from more specialized texts. On acid-based balance, for example, the sole use of the Astrup nomenclature and derivations may be found jarring by those more familiar with other ways of considering the controversial problems of acid-base calculations and terminology.

If the surgeons buy a copy for the hospital library then chemical pathologists will find it useful to study if they are called in consultation on the surgical wards: it cannot be recommended for the pathology department library. The many Americanisms, such as mg. per cent, urinalysis, unit (of transfusion fluid) are surprising from authors working in England. For so high a price the reader has a right to expect graphs of universally high quality and no printing errors.

D. N. BARON


The primary bile acids are formed in the liver as degradation products of cholesterol and are excreted in the bile as peptide conjugates of glycine and taurine. These conjugates are metabolized during enterohepatic circulation to secondary bile acids which are re-excreted in the bile and are predominant in faeces. Their determination in body fluids is difficult, and, since in man 95% of these acids are re-absorbed from the gut and are altered during this passage and re-passage through the liver, the clinical importance of their measurement in disease is limited. The vagaries of the concentrations in blood and urine have been attributed to deficiencies of the analytical methods, to the role of liver in metabolism as well as in synthesis of bile acids, and to the effect of the bacterial flora in the gut.

There are now no such excuses in further delaying a proper re-examination of the whole field, for Professor Haslewood’s book provides an excellent up-to-date account of the chemistry and biochemistry of the bile acids and analytical methods for their determination in seven chapters, of which two are concerned with the enterohepatic circulation and the bile salts in man.

Although many pathologists will find the nomenclature and the wide variety of bile acids in different animal species somewhat formidable, this inexpensive book of only 81 pages also has a useful 26-page appendix of lists of the bile salts so far identified in many species, and an eight-page index. It is, therefore, both a book of reference and of ideas that will stimulate those seeking a subject for investigation. The only minor criticism is that the approach tends to be that of an organic chemist, the question of pool sizes and kinetics of bile acid turnover receiving little mention. Such problems are likely to be difficult but the information in this book and the possibility of making use of computers should make possible a study in man.

C. H. GRAY


Progress in the study of bilirubin metabolism has been rapid in the last 10 years though limited by the very difficult analytical and other techniques. Thus routine measurement of unlabelled bilirubin still depends upon modifications of the Van den Bergh diazo reaction with the conjugated and unconjugated pigment and the capriciousness of the reaction has only recently been appreciated. Moreover, the interpretation of the results of isotope experiments depends frequently upon the isolation and purification of minute amounts of bile pigment—often a particularly difficult task.

This book, therefore, opportunely brings together the papers read at the Symposium on Bilirubin Metabolism in July 1966 at the Royal Free Hospital, London, attended by 50 participants. Here is now a useful summary of the most recent work from Europe and America. The book is well edited into six sections, these covering the origin of bile pigments and including work on the increasingly complex early labelled peak of bilirubin in the bile; the structure of bile pigments and their protein binding; transport, including hepatic uptake and excretion of bilirubin; and the effect of complete biliary obstruction. Several studies have shown that in this last situation bile pigments are excreted mainly in the urine, while in unconjugated hyperbilirubinemia faecal excretion predominates. The difficulties of measuring urine diazo compounds and the variability of urobilinogen output are clear in the section on the renal excretion of bile pigments, and the last two papers describe the staining of bilirubin in tissues.

Useful summaries and discussions follow many of the papers, and supply extra information and differences of viewpoint. The book is well produced and edited and has a good index. It would alone be valuable to the biochemist in this field for its details of recent methods, especially the work with carbon 14 and tritiated bilirubin, but is also (though sometimes less obviously) full of information for the pathologist and clinician, for much of this work will soon lead to advances in therapeutics.

C. H. GRAY


The translation of Dr. Sandor’s book by Einhart Kawerau is a considerable achievement, for it transmits the extraordinary range of the original author’s ideas.

Protein chemistry is moving at such a pace that no book can be up to date. One of the most valuable features of this compilation is the extensive list of references given at the end of each chapter. This in itself will give the book value when the contents are totally dated.

At 12 gns., it would be too expensive for many laboratories, but it should certainly find a place in the larger laboratories of chemical pathology and in all reference libraries.

NICHOLAS H. MARTIN