Book reviews


This volume, to which there are 19 contributors, has grown from the proceedings of a symposium on the Male Reproduction System at a meeting of the Electron Microscope Society of America and concentrates, in particular, on ultrastructure as studied by scanning and transmission techniques. The subjects covered include the structure of spermatozoa, testicular biopsy in infertility, appearances in the testes after vasectomy, structure of Sertoli cells and their role in spermatogenesis, and prostatic carcinoma. Nine of the 11 chapters describe the findings in a wide variety of experimental animals and only two are directly concerned with the human, though throughout the book the emphasis is on relating the experimental results to the human clinical experience. The text is illustrated by electron micrographs, which in general are of good quality. The bibliography is full and up to date. Anyone interested in the many problems of infertility in the male will find this a useful and stimulating addition to their library.

R. C. B. PUGH


This is a comprehensive analysis of the cytophysiology and pathology of the pancreatic islets, in particular in diabetes mellitus. It is up to date and likely to prove indispensable to all workers in the field. The confusing problems of the description of islet cell types and their enumeration are particularly clearly handled by Bosquist and by the editors themselves; and the latter contribute an authoritative series of chapters on the pathological changes found in the islets in idiopathic and hormonal diabetes (mellitus), and again in the infants of diabetic mothers. They discuss in detail the relationship between diabetes and conditions such as pancreatitis and haemochromatosis. The pathology of juvenile diabetes is covered by Lecompte and Gepts, and there are helpful sections on spontaneous diabetes in animals and on chemically and hormonally induced diabetes.

Aspects of more fundamental cyto-physiological interest include a masterly chapter on the physiology of insulin release, by Lacy, and an analysis, in part based on the use of freeze-fracture, of the morphology of membrane systems in the islets, by Ori and Perrelet.

The chapter on endocrine tumours of the pancreas by Creutzfeldt is fascinating and reviews a field that will prove of increasing importance to pathologists. Attention is given, incidentally, to a practical diagnostic problem, which is sometimes unappreciated, namely, that actively secreting cells may not accumulate sufficient secretory product to allow the identification of the cell-type involved. In particular, the secretory cells of insulinomas often lack granules staining with the aldehyde fuchsin technique, a difficulty partly overcome by the use of more sensitive immunocytochemical methods.

This aside, there is also a particularly interesting paper by Hegre and Lazarow on islet transplantation, a procedure which looks like being of therapeutical value in the future.

This is a first-rate analysis of the pathophysiology of the pancreatic islets, which emphasises the importance of the concurrent application of up-to-date biological and morphological techniques, made by Symington in his rather similar analysis of the pathology of the adrenal cortex.

The book merits expansion into a comprehensive monograph worthy of Lubarsch and Henke's Handbook of Special Pathology.

J. C. SLOPER


This is more a textbook than an atlas with its 230 pages of script and 1384 references, though it contains over 360 colour plates. These, though small in size, are well chosen and expressive and display on the whole a good colour balance.

The approach is one of an academic treatise, as one would expect from the author, and the treatment of chapters on cell constituents, cyrogenetics, and the use of electron microscopy set a high standard.

Attention to collecting and processing techniques is emphasised throughout the volume, and there is a chapter devoted to stains with a brief account of quality control and automation.

The study of disease patterns, such as the preinvasive states of the cervix, are along traditional lines, utilising the WHO classifications and the UICC classifications of urological tumours with their pre-malignant stages well described, though this is less well documented in the case of the gastrointestinal tract.

Overall, the bibliography and depth of study of the subject matter at the Institute of Jules Bordet are reflected in this volume, and make it a work worthy of possession by diagnostic cytologists, both in training and in practice.

O. A. N. HUSSAIN


This well-produced book is one of a series of 36 volumes and is the first of three volumes on infections of the nervous system. The reviewer has no personal knowledge of the other volumes of the series, but the indications are that the series is aimed primarily at clinicians (neurologists, paediatricians, and neuropathologists) but the present volume includes a wealth of information for infectious disease clinicians, microbiologists, and general pathologists as well as for neuropathologists.

This volume is a multi-author work, with 22 chapters which consider both the common and less common bacterial infections. Syphilis, leptospirosis, and relapsing fever are also covered. Although volume 36 is to deal with intoxications, the editors thought it wise to include chapters on neurological complications of diphtheria and on tetanus in this volume, but botulism is deferred to volume 36.

There is a full description about all varieties of infection, the various investigatory procedures that may be...
invoked to assist in diagnosis, a range of various host factors that may predispose to infection extending from hair-line skull fracture to sickle-cell disease, and abnormalities of the complement system. Modern techniques, such as brain scanning, angiography, cisternography, electroencephalography as well as fluorescent antibody tests, countercurrent immunoelectrophoresis, Limulus lysate test, Nitroblue tetrazolium test, autoradiography, and procedures for detecting bacterial antigen in CSF and serum, are referred to in the appropriate sections.

Each chapter discusses complications and prognosis and gives recommendations about treatment while the general editors admit that this aspect of the handbook may not meet the approval of all readers and is the part of the book that is likely to become outdated quickest. Not every chapter gives a detailed account of gross and histopathology when pyogenic organisms are being considered, otherwise the charge of repetition would have been made, with justification. The chapter on the neurological sequelae to pertussis infection and immunisation was studied with care in view of the current situation and was considered to be a well-balanced presentation of the facts, and indeed this chapter contained more references to pathology than some other chapters. Because the conditions are particularly uncommon in the UK now, and seldom fatal, the reviewer was particularly attracted to the chapters on brucellosis, leptospirosis, and leprosy. Indeed, the chapter on leprosy is the only one in this volume to use electron micrographs.

Most of the authors are American and clinicians, but Europe and India are also represented; all write clearly and with authority. It is a worthwhile reference book on topics of which it is becoming more and more difficult for any one clinician (or even unit or department) to acquire much experience, at least in the UK. Very nearly all illustrations are of high quality and enhance the text. The reference lists are full yet selective.

This volume fills a very useful place in the series and, in conjunction with the other two volumes still to be published, No. 34 on viral and rickettsial diseases and No. 35 on all other classes of infectious organisms, should make a valuable trio in their coverage of the field of infections. The volume is expensive even by present-day standards although it has a 'de luxe' presentation, and while each volume is a 'handbook', it is rather erroneous to title the whole series in this way, when an encyclopaedia is being provided.

J. F. BOYD


This modestly priced book provides a wealth of basic information on fibrinolytic mechanisms and the pathological changes in disease states. The physiology and biochemistry of natural and synthetic activators and inhibitors, the interactions of plasmin with fibrinogen and fibrin, and the catabolism of fibrinogen and its breakdown products comprise the first section of the book. This is followed by chapters on pathological alterations of fibrinolysis in clinical situations, including inflammation, disseminated intravascular coagulation, pregnancy, cancer, and renal disease. While clinically applied, these reviews emphasise fundamental concepts and recent research findings. Thrombolytic therapy with urokinase and streptokinase is also briefly reviewed.

This book will be of considerable value to basic scientists, clinicians, and pathologists working on fibrinolysis. It is not for the trainee or general reader. While most of the book is based on a 1977 symposium held in Istanbul, the contributors and editors have succeeded in making it more broadly based to provide a compact but informative review of current research activity in this important subject.

J. STUART


First published in France in 1971, the English version of the book, which was favourably received, appeared in 1973. The second edition of this paperbacked, moderately priced, and somewhat enlarged book is therefore welcomed.

The original format has been retained, though inevitably with the growth of knowledge fairly extensive changes have had to be made to the text. There are now 11 chapters that adequately deal with the principal lesions of the nervous system, an appendix that outlines neuropathological techniques with additional information on muscle, peripheral nerve, and brain biopsies, a short bibliography of recommended textbooks and monographs, and a full index that gives both the page and figure numbers.

Whereas some of the chapters have been restructured and only slightly modified, the updating of those on infectious diseases and genetically determined metabolic diseases due to enzyme defects has required that they be rewritten. Even so, only those recent advances in neurobiology that have helped to elucidate basic processes in neuropathology have been included. Regrettably, there has been a tendency not to include some of the better established functional changes that occur in association with intracranial disease. For example, the opportunity might have been taken to devote a separate chapter to the pathophysiology of raised intracranial pressure. This would have been preferable to the classification of rare disorders simply for the sake of completeness.

The air of mysticism that not infrequently surrounds neuropathology is due in part to its 'highly specialised nature'. This unfortunate state of affairs has been part fostered by the lack of a suitable book that has bridged the gap between a chapter in a standard textbook and the specialised reference books. This manual helps to fill the gap, and there seems little doubt that its continuing popularity will stem from the clarity of its presentation, the high-quality illustrations, and the liberal use of flow and line diagrams. This book is highly recommended for general pathologists and as a primer for neurologists, neurosurgeons, and neuropathologists in training.

D. L. GRAHAM


This short report is a great contrast to many of the other publications in this series; it contains a very clear review of the risk to women from the use of steroid contraception. This is based upon published case reports and epidemiological studies.

There is a brief introduction, which includes a discussion of some of the