BOOKS RECEIVED

Viral Infections of the Heart

Edited by J. E. BANATVALA. 1993. ISBN 0-340-55737-0. Edward Arnold. Pp. 257. £50.00.

The clinical significance of viral infections involving the heart is most probably underestimated. Definitive aetiological diagnosis of viral myocarditis has been extremely difficult, a situation only partially remedied by the advent of endomyocardial biopsy techniques and sensitive genome detection assays. Further controversy surrounds the issue of whether idiopathic dilated cardiomyopathy represents the end-stage of a virally-triggered chronic myocarditis or not.

This book provides a timely assessment of state-of-the-art knowledge on these and other aspects of an increasingly important area of clinical practice. The authors are from a range of disciplines, which reflects the stated aim of the editor to address a broad audience. Thus, basic principles of molecular virology are explained for the benefit of the cardiologists, whilst the finer points of clinical cardiology are outlined for the benefit of the more laboratory-orientated readership. Contributions are also forthcoming from experts in epidemiology, viral pathogenicity, immuno-pathogenetic mechanisms and histopathology. This multi-author approach inevitably leads to some repetition. Firmer editorial guidance might have prevented the reiteration of the characteristics of the viruses implicated in cardiac disease, or of the Dallas criteria for the histological assessment of myocarditis, to give but two examples; although it could be argued that repetition of concepts likely to be unfamiliar to sections of the intended audience is no bad thing.

Basic virology is covered in detail in the opening chapter, followed by a brief review of the epidemiology of the relevant infections. Overviews of the histological and clinical diagnosis of myocarditis and dilated cardiomyopathy are then presented. Comprehensive summaries of animal model work and of studies in man reveal the difficulties encountered in trying to unravel the pathogenesis of virus-mediated cardiac damage. Three chapters are then devoted to aspects of specific virus infections: the role of HIV infection in heart disease, which will undoubtedly become an area of increasing importance; the role of CMV infection in atherogenesis, an intriguing controversy which is discussed clearly and convincingly; and the recent advances contributing to diagnosis of enterovirus infections. The final two chapters are concerned with treatment and prevention, and with the particular problems encountered in heart transplant recipients.

The book is readable, informative, well-presented and illustrated, and clearly highlights those areas of current deficiencies in our understanding, and I have no hesitation in recommending this volume to both virologists and clinicians.

W. IRVING

Obstetric and Gynecologic Infectious Diseases

Edited by J. G. PASTOREK. 1993. ISBN 0-7817-0023-X. Raven Press, New York. Pp. 798. \$157.50.

This is a very comprehensive textbook and medical microbiologists in the UK may wonder how it is possible to produce 798 pages on Obstetric and Gynaecologic infections. Anecdotally, from personal experience in the USA and from discussions with colleagues, it does appear that these infections may be either more severe or more frequent than in the UK. They have certainly received more attention. This book is a mine of laboratory and clinical information. My only concern is that a reader in the UK might get a rather distorted view of the problem. However, I strongly recommend this book as a reference source. The chapters are succinct and clear with a well balanced editorial style.

Section I, *General Considerations*, contains seven chapters. In addition to the obvious topics of history, microbiology, anatomy and immunology, there are two very useful chapters on temperature and fever, and on infection control issues. Similarly, Section II on *Gynaecological Infections* and Section III on *Obstetric Infections* contain the obvious descriptions of clinical syndromes but are augmented by chapters on septic shock in the Ob-Gyn (sic) patient, the impact of genital infections on fertility, and amniotic fluid and its relation to infections. Section IV deals with sexually transmitted diseases, including hepatitis B and a chapter on infectious aspects of contraceptive practices. The final section deals with diagnosis and therapy and this is where the gulf is widest between American and British practice. The recommendations on proper antibiotic usage by Louis Weinstein are conservative by American standards but rely heavily on empirical intravenous therapy of post-operative infection, whereas most women in the UK will be treated successfully with oral agents.

Overall, this is a very useful reference source about the science of obstetric and gynaecological infections and about clinical practice in the USA.

P. DAVEY

Chemical Methods in Prokaryotic Systematics

Edited by M. GOODFELLOW and A. G. O'DONNELL. 1994. ISBN 0-471-94191-3. John Wiley and Sons Ltd, Chichester. Pp. 576. £65.00.

At a time when the emphasis in medical microbiology appears to be on the rapid characterisation of individual strains, this book is a timely reminder of the need for sound classification, nomenclature and identification of prokaryotes. As one of the texts in the series *Modern Microbiological Methods* this book aims to provide up-to-date methods and a discussion of their limitations for research workers and other interested parties. Undoubtedly inspired by the use of chemical markers as the foundation of classification and taxonomy, this book extends traditional biochemical approaches to where they blur into those which some might term molecular simply because the latter is perceived to be more fashionable.

An impressive list of techniques is described, complete with theoretical basis, technical tips, interpretation, applications, taxonomic considerations and extensive reference lists. The bacterial components covered include the constituents of gram-negative bacteria (peptidoglycan, outer-membrane proteins, lipopolysaccharides, extractable lipids, polysaccharides and rapid whole-cell procedures), the constituents of gram-positive bacteria (peptidoglycan, anionic polymers and polysaccharides) as well as the analysis of archaeal cell envelopes. Individual chapters are devoted to lipids (eubacterial and archaeal), sterols and hopanoids, isoprenoid quinones, cytochromes, pigments and DNA base composition. The three chapters on enzymes in taxonomy and diagnostic bacteriology, analysis of electrophoretic whole-organism protein fingerprints and analytical fingerprinting methods are relevant particularly to microbiologists working in the medical field.

This book provides a comprehensive insight into the chemical methods which are of use in systematics and illustrates the fluidity of the boundaries between identification, typing and characterisation. It is an excellent book and one which every academic microbiology department library should possess. I would also recommend it to anyone with a serious interest in bacterial systematics, typing or molecular epidemiology. If I had not been given a copy to review I would have bought one, even at this price.

J. ZOE JORDENS