BOOKS RECEIVED

Basic serodiagnostic methods for diseases caused by fungi and actinomycetes


The Mycological Reference Laboratory, which is held in high esteem for the quality of its diagnostic service and research in fungal serology, has recently encouraged many laboratories in the Public Health Laboratory Service to undertake primary investigations, and this manual contains the recommended basic methods. It will be useful to any laboratory setting up such a service, and it contains material that will be valuable also to clinical microbiologists and others who need to interpret the results in diagnosis. It is designed for practice in the United Kingdom, concentrating on aspergillosis, candidosis, cryptococcosis and farmer's lung disease.

The book begins with a constructive introduction to the subject of serodiagnosis, and this is followed by a list of the principal serological techniques in current use, and a useful table of the most relevant tests for the various mycoses, with notes on the commercial availability of reagents. The main text comprises detailed methods for various techniques: immunodiffusion (including counterimmunoelectrophoresis), agglutination, latex agglutination for cryptococcosis and indirect immunofluorescence. The preparation of antigens is described in an appendix. The methods are well tried and reliable, and they are fully described with much advice on practical matters for the novice. Only occasionally are there passages in the descriptions that a beginner might find obscure, or in which logical stages in the methods are assumed rather than included.

There is a judicious chapter about the interpretation of results in the various infections. Perhaps the most difficult situation is the assessment of serology in the diagnosis of disseminated candidosis, and the section on this subject is suitably cautious without being nihilistic. Striking examples of precipitin tests in candida endocarditis, for some reason appearing separately in the Methods section, illustrate the value of these, although it must be acknowledged that the slow evolution of this disease lends itself to these serial studies. This inexpensive manual is an excellent addition to the Public Health Laboratory Service Monograph Series, and it should have a wide circulation.

D. C. E. Speller

Infection in surgery—basic and clinical aspects


The editors and publishers should be complimented on the speed and efficiency with which they managed to bring out this book based on a symposium held in Adelaide only in May of the same year. Although it is probably a very good record of the proceedings of that meeting, providing much detailed information about selected areas of the subject, it inevitably lacks coherence and consistency of style. With over 50 contributors, an unevenness in the depth and quality with which different topics are covered is only to be expected. Perhaps more drastic editing and the use of cross references, which are almost totally lacking, could have made the book more cohesive.

Some of the best contributions are in the early introductory section, which includes an excellent overall review by Dr Burke followed by an interesting historical survey by Dr Fraenkel. Articles are then grouped together either on the basis of special general problems,
such as antimicrobial prophylaxis and support of the septic patient, or according to the different branches of surgery.

The problem of infection cannot be ignored by any surgeon and it is vital that they keep up to date with all the new evidence relating to infection in their own speciality. Unfortunately, I am not sure that this book is the most useful for this purpose. Whilst especially some of the earlier articles should perhaps be compulsory reading not only for all surgeons but for all doctors and medical students, the articles dealing with special areas of surgery are of a variable standard and in some cases give a very onesided view. On the other hand, this book should be very useful to the microbiologist for whom it will provide a detailed record of an important symposium, including the most recent work of some of the leading specialists in the field.

J. H. DORMANDY

**Anaerobes and anaerobic infections**


This record of the three symposia on anaerobic bacteria held at the XIIth International Congress of Microbiology in Munich, in 1978, comprises the full texts of the papers presented but does not include any transcript of the discussions. It is presented in the format of a single-issue journal and is published more than two years after the congress. The contributors include many of the leading medical and scientific microbiologists in the field of anaerobic bacteriology. However, the language and style of some contributions reflect the problems of presenting "proceedings" in English when this is not the first language of either the contributors or the editors.

The three sections of the book correspond with the three symposia. The four papers in the first section consider the fundamental properties of anaerobes. Professor J. G. Morris presents a lucid appraisal of oxygen toxicity and tolerance, and other contributors consider the complex areas of electron-transport systems and the role of metal ions in metabolic pathways. The second section on pathogenic anaerobes attempts a broad coverage of human disease caused by anaerobes coupled with some consideration of sensitivity to antimicrobial agents, including lysozyme. Some of the papers on the general topics of anaerobic infections (S. M. Finegold) and classification of anaerobes (E. M. Barnes) are too brief and superficial for the size of the subjects; they were probably useful in the context of the symposium but do not constitute significant contributions to the published literature on anaerobic infections. However, W. J. Loesche gives a good assessment of the pathogenesis of periodontal disease and there are summaries of work on endotoxin and $\beta$ lactamases. The last section on syntrophism and bacterial interactions emphasises the importance of mutually beneficial combinations of bacteria. This concept has important implications for medical microbiology but the four papers are not particularly relevant to medicine. They concentrate principally upon thermodynamic energy transfers and carbon balances in methanogenic bacteria although M. J. McInerney and M. P. Bryant demonstrate the importance of anaerobic combinations in the animal rumen and in sludge digesters.

B. I. DUERDEN

**Microorganisms and nitrogen sources. Transport and utilisation of amino acids, peptides, proteins and related substrates**


The subtitle of this book gives a fair indication of its contents, the main emphasis being on the transport and utilisation of nitrogen sources by micro-organisms of all kinds including prokaryotic bacteria, yeasts, fungi and algae. Higher plants and even mammals are included in a few sections. There are 26 self-contained chapters, five of which are written by the editor alone or with collaborators, the remainder being written by some 30 scientists working in a variety of disciplines. It is, therefore, not surprising that the style and length (14–52 pages) of the chapters is varied. They range from turgid review-style articles peppered with references, through accurate accounts of current research to imaginative and forward-looking contributions.