aspects of current knowledge of the clostridial neurotoxins, namely tetanus toxin and botulinum toxins A–G. The chapters are varied in content and quality but most will be of interest to the general reader.

The first chapter deals with the ecology and taxonomy of the neurotoxigenic clostridia. It will probably not surprise most readers to learn that Clostridium tetani is genetically homogeneous but that C. botulinum encompasses a range of genetically disparate bacteria belonging to several species, a good illustration of the hazards of classifying microorganisms on the basis of pathogenicity. The second chapter reviews the present status of tetanus and tetanus immunisation, and the third examines the current status of botulism as a disease of man and animals.

In the fourth chapter the cellular basis of B- and T-cell responses to tetanus toxoid are reviewed. Somewhat misleadingly, the authors refer to this as tetanus neurotoxin and give the impression that these entities are antigenically interchangeable. In this context it would have been helpful to have had some discussion of the effects of toxoiding on the antigenicity and molecular structure of the clostridial neurotoxins. Somewhat surprisingly, this admittedly not novel issue is not addressed at any depth in this volume.

Other chapters deal with immunodiagnosis and immunotherapy of the neurotoxins, including their preparation, molecular genetics, neurological interactions and clinical applications. Perhaps the most topical and informative chapter is the final one which discusses the subcellular and molecular basis of action of the clostridial neurotoxins. Information on basic biochemistry of neurotoxin action and their characterisation as zinc endopeptidases with highly selective substrate specificity has only recently emerged. The authors give an excellent description of the sites and mode of action of the various toxins at the subcellular level.

Although mainly of interest to the specialist, this book will also be useful to anyone who wishes to update their knowledge of the mode of action and clinical aspects of clostridial neurotoxins.

M. J. CORBEL

Antimicrobial Chemotherapy, 3rd edition


The aim of the first edition of this book was to provide an introductory textbook devoted to the basic principles of antimicrobial chemotherapy. The importance of a good textbook on this subject cannot be underestimated. Escalating levels of antibiotic resistance and an absence of new agents means in the short-term that the future of successful chemotherapy relies on minimising the selection and spread of resistance by the judicious use of existing compounds. This can be achieved only through education and it is one of the hopes of the editor that this book will go some way towards promoting sensible use of antimicrobial agents.

The book is divided into five sections covering general properties of antimicrobial agents, laboratory aspects of antimicrobial therapy, resistance to antimicrobial agents, general principles of usage of antimicrobial agents and the therapeutic use of antimicrobial agents. In general these sections provide a comprehensive introduction to the subject at a level suitable for undergraduate medical students. Despite the fact that it is a multi-authored text the chapters are well integrated and there is little repetition of material although there are some differences in the style of certain chapters.

Although the third edition represents a thorough overhaul and extensive revision of the earlier editions, the book does have a rather old-fashioned feel about it compared to some of the more modern medical microbiology texts, and indeed CD ROMs, which are competing for the student’s attention. However, appearance is not everything and there are several excellent sections in the text, in particular section III which deals with resistance to antimicrobial agents. This is an area of antimicrobial therapy where changes and new developments occur at a bewilderingly fast pace and it is pleasing to see a section in a general textbook that is so up to date. The section on genetics of resistance in particular gives a clear description of the complex events surrounding the evolution of resistance genes, including the complex mobilisation of resistance genes within transposons and integrons. In addition, the clinical problems of escalating resistance are put in context, highlighting the emergence of resistance in enterobacteria, methicillin resistance in Staphylococcus aureus and vancomycin resistance in enterococci. It is perhaps surprising that more of these problems are not highlighted in the Preface or Introduction, which if anything downplay the threat of resistance. Indeed, it is worth remembering that it may well be the future readers of this edition of Antimicrobial Chemotherapy who have to manage these potentially untreatable infections.

Overall, I think this is a useful reference textbook which undergraduate medical students will find beneficial in coming to grips with the principles of antimicrobial chemotherapy.

C. THOMSON

Invasive Fungal Infections in Cancer Patients, volume 2/number 1: Bailliere’s Clinical infectious diseases


This book boasts a host of authors who are internationally renowned in the field of medical mycology and lives up to the promise anticipated by seeing their names as contributors. The chapter on pathology concentrates mainly on Candida (virulence, lytic enzymes, switching mechanisms, dimorphism) with other fungi relegated to a short paragraph at the end, but this is a reflection on the work done in this area. The chapter on invasive disease puts diagnostic methods for Candida and Aspergillus in perspective and highlights cryptococcosis, histoplasmosis and coccidioidomycosis as diseases in which most success has been gained.

Several authors emphasise the requirement for the isolation of the infecting organism and its accurate identification, especially with view to its susceptibility for selection of therapy. A comprehensive chapter on laboratory diagnosis highlights the problems encountered and the hopes for the future for various diagnostic markers and PCR, with their strengths and limitations. Emerging pathogenic fungi including non-albicans Candida species, such Trichosporon, Malassezia, and the agents of hyalohyphomycosis and phaeohyphomycosis are discussed along with the implications for therapy.

There follow five chapters on antifungal therapy, each concentrating on a different perspective. Amphotericin B is