Book Reviews

Livingstone: 1994, £90.00. ISBN: 0443044058.

The first edition of this book proved to be indispensable as a reference book although with time the 1985 text had become very out of date. The new second edition is therefore very welcome. The second edition is also much more than an updating of the earlier edition, as it has grown from 14 chapters and 331 pages to the current 21 chapters and 470 pages. On the way, we have lost some of the grand old men of leprosy, such as Charles Shepard and Paul Brand, but there are welcome additions, and in particular, the immunology section has been greatly expanded. This is an excellent reference text for those wanting to know more about leprosy, particularly those who would like an overview of the disease as well as the more molecular aspects, and Dr Hastings is to be congratulated.

The first chapters deal with leprosy in history (S. R. Ell), and history of leprosy including the start of modern leprology, chemotherapy and animal models (J. R. Trautman), and epidemiology (S. K. Noordeen). The chapter on microbiology (R. J. W. Rees and D. B. Young) includes information on the structure of *Mycobacterium leprae*, its growth and biochemistry. As well as including new information on the structure of *M. leprae*, and on drug resistance, this chapter now has new sections on the *M. leprae* genome and on molecular genetics.

The coverage of immunology has been greatly expanded, and now includes an overview of host-parasite relations (M. Harboe), with an overview of the design of the first generation of anti-leprosy vaccines, and a chapter on immunogenetics (R. R. P. de Vries and T. H. M. Ottenhoff). The chapter on M. leprae antigens and molecular biology (R. J. Booth and J. D. Watson) provides a useful review of individual M. leprae antigens, although inevitably, more could now be included. A chapter on the role of the macrophage in resistance to leprosy (J. L. Krahenbuhl) provides information on where M. leprae may be found within the macrophage, and what strategies the macrophage employs to try and kill the bacteria. Finally there are chapters on cell-mediated immunity (S. H. E. Kaufmann), including the possible roles Th1 and Th2 T-cells and cytokines may play in the immune response, and on serology (T. M. Buchanan). Overall, this section provides a very balanced coverage of the immunology of leprosy.

The book then continues with a section on the different types of leprosy and their pathology. Dharmendra's chapter describes the various classification schemes which have been used for leprosy, and is followed by a chapter on pathology (C. K. Job) which details the histopathology found in the different forms of leprosy, and in different tissues. A chapter on immunopathology extends this to include the types of T-cells and cytokines found in leprosy lesions (R. L. Modlin and T. H. Rea). The chapter on experimental leprosy (W. M. Meyers, B. J. Gormus and G. P. Walsh), placed later in the book, might have belonged better in this section, as it covers the use of mice, armadillos and non-human primates as experimental models in which the pathology and immunology of M. leprae infection can be studied.

The remainder of the book is devoted to descriptions of clinical leprosy, with large numbers of photographs (R. E. Pfaltzgraff and G. Ramu), differential diagnosis (E. Nunzi and P. Fiallo), treatment (R. R. Jacobson), ocular leprosy (V. C. Joffrion) and control programmes (M. E. Lechat and E. E. Declercq). Finally, there are two chapters covering the important topics of disability, deformity and rehabilitation (H. Srinivason) and social integration (T. F. Frist).

Sadly, the preface by Dr Hastings, and the reference lists, reveal that the book was essentially written in 1991. This inevitably means that there have been significant new developments, particularly in molecular biology, and in immunology, which have not been included. However, this is the only drawback to what is a very useful and informative book, which will undoubtedly replace the earlier edition as the central reference text in leprosy.

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