BOOK REVIEWS

Borna Disease

Current Topics in Microbiology and Immunology, volume 190

Edited by H. KOPROWSKI and W. LIPKIN. 1995. ISBN 3-540-57388-7. Springer Verlag, Berlin. Pp. 134. Hardback DM 150.00.

Equine Borna disease (BD), as the editors point out in their preface to this fascinating volume, was first described over 200 years ago in what is now part of Germany, but wider interest has blossomed only recently with evidence for natural infection and disease in many other parts of the world and in a range of species that includes man.

The book begins with a chapter on the virus and its molecular biology. One problem with attempting to write an overview of such a rapidly moving subject is that a lot can happen between writing and publication. Thus, although the authors review a great deal of data, much of it in press at the time of writing, a description of the complete sequence of the virus genome, its transcriptional peculiarities, and the first electronmicrographic study of the virus's morphology are found in a short note added in proof. Although this might appear a criticism of the book, in fact it merely serves to illustrate the rapid advances being made. The core of the chapter remains an excellent and much needed guide through the pre-1995 literature, which is scattered among English and German language microbiology, neurology, medical and veterinary journals.

The next chapter is a well-referenced overview of natural and experimental BD in animals. This concentrates mainly on horses and experimental rats but also mentions infection in cattle, sheep, goats, deer, cats, camelids and chickens, and discusses the possibility of a rodent reservoir. Then comes a short chapter specifically on BD in ostriches – and in case anyone questions the importance of ostrich diseases, it should be noted that in the UK an adult ostrich can be sold currently for about the same as a junior lecturer's annual salary. There are two chapters on neuropathology and neuropathogenesis, the second concentrating on the role of the immune response in the development of disease, followed by a short chapter which discusses the behavioural changes and neurochemistry of BD, in particular the effects of infection on the dopamine system. The final chapter reviews the evidence for human infection and possible BDV involvement in various psychiatric disorders.

This book provides a timely series of reviews of an intriguing virus and its diseases. Although the rapidly developing nature of the field means that many of the chapters have missed some very recent but important

discoveries, notes added in proof guide the reader to some of the newer papers. The book is a must for anyone who has read some of the recent papers on BD in man or other species and wants to know more.

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Molecular Pathogenesis of Surgical Infections

Edited by T. WADSTROM, I. A. HOLDER and G. KRONVALL. 1994. ISBN 0941-018X. Gustav Fischer Verlag. Pp. 520. DM 258.00.

This book is based on the 21st Ferstrom Symposium held in Lund in June 1992. It is a multi-author book which presents many facets of the pathogenesis of surgical wound infections.

The symposium had several defined goals. These included a review of the effect of graft material on surgical wounds, microbial cell surface determinants involved in adhesion to grafts and host factors associated with wound healing.

Therefore, the main emphasis of the text is based on a description of the current knowledge of pathogenic determinants associated with the development of wound infections. These range from the genetic analysis of *Staphylococcus aureus* virulence, activation of human plasminogen by staphylokinase, protein binding of group A streptococci, and the effect of cell-surface hydrophobicity and protein binding of different bacteria. Fibronectin-binding proteins associated with staphylococci are reviewed in one section. Other receptors, including plasminogen and plasmin for both gram-positive and gram-negative organisms, together with the role of extracellular slime substance, are also discussed. Several chapters deal with the wound healing process, involving the role of macrophages and activation of lymphocytes and mesenchymal cells. Experimental animal models are described, including endocarditis, staphylococcal abscesses and biomaterial infections. The role of some antibiotics for the treatment of various wound infections, including those associated with foreign material, is described briefly.

As William Noble states, 'we do not yet have a clear picture of the factors which permit colonisation of the skin and those which cause the resulting infection'. This textbook goes a long way in answering some of these fascinating factors. It should be of value to workers interested in surgical infections, particularly those associated with prosthetic material.

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