Pneumococcal polysaccharide vaccines are licensed in many countries but their value in high-risk groups, such as patients with Hodgkin's disease and the elderly, remains uncertain. Field trials of efficacy in such groups can be difficult, and a short review by G. Schiffman describes how the problem is being addressed by studies of the antibody response, and by attempts to establish the concentration of serum antibody associated with specific immunity in different disease states.

Despite growing understanding of the pathogenic processes of cholera, a really effective vaccine has yet to be prepared. J. La Brooy and D. Rowley review the great amount of research that may eventually lead to success. Inactivated sub-unit vaccines are being explored, but the use of live vaccines, prepared, for example, by recombinant-DNA techniques that introduce protective cholera antigens into *Escherichia coli*, may offer the best prospects for intestinal immunity. Progress is hampered by the practical difficulties of conducting field trials of cholera vaccines and of measuring intestinal secretory immunity.

The complex pathogenic factors of *Bordetella pertussis* are also now being characterised by the application of modern techniques of physicochemical analysis and purification. These developments are considered in a valuable chapter by A. C. Wardlaw and R. Parton in relation to the clinical problems of vaccine safety and efficacy. The successful development of purified, non-toxic vaccines is now very likely, and indeed Japanese workers have introduced an acellular vaccine that may be safe and efficacious.

The final review by B. Cohen, S. L. Peach and R. R. B. Russell concerns the use of protein antigens of *Streptococcus mutans* to vaccinate against dental caries. Experimental studies suggest that significant protection can be secured, and the rationale and potential problems of evaluating, in children, a vaccine against this non-fatal but unpleasant condition are authoritatively considered.

The main topics of current interest not examined are *Haemophilus influenzae* and live *Salmonella typhi* vaccines, which have now been licensed in a number of countries, and research on possible shigella vaccines. The toxoids are not reviewed, nor is attention given to anthrax, plague, staphylococcal and streptococcal vaccines; but these topics probably attract less research interest at present, which may justify their omission. This book will be of help to microbiologists, clinicians and others seeking a clear and comprehensive picture of the up-to-date position on the topics covered.

J. W. G. SMITH

Antibiotics and infection

Edited by S. C. EDBERG and S. A. BERGER. 1983. Churchill Livingstone, Edinburgh. Pp. xiv and 234. £24.00.

I could not understand at first why the publishers of Garrod, Lambert and O'Grady's excellent summary of the European antibiotic scene—"Antibiotic and Chemotherapy"—should produce this book at the same time. It is a multi-author text "presented in telegraphic outline format to facilitate rapid location of important data". The material is certainly easy to find and concise. Perhaps it is too concise and easier to read than to do, e.g., on herpes simplex encephalitis, "After confirmation of the diagnosis by brain biopsy the patient is given adenosine arabinoside (ara-A) 15 mgm/kg/day as a 12 hour infusion". The trouble with short concise statements is that they tend to oversimplify. A further example is a table of "major pharmacokinetic parameters" which has half life and dosage intervals only. The dosage interval is very simple—4, 6, 8, 12 or 24 hours.

There is also some variation about recommendations for similar compounds. For example, the nalidixic acid/oxolinic acid contraindications given are (1) renal insufficiency (2) nursing mothers and (3) infants under 3 months, whereas for cinoxacin (an almost identical compound) they are (1) pregnancy (2) nursing mothers and (3) prepubertal children. I wonder what certainty underlies these different recommendations. The problem of unevenness of multi-author books comes out clearly in this book. In the antibiotics lists, gentamicin gets 16 lines, amikacin 6 and spectinomycin 52. Schistosomiasis gets two pages, bacterial meningitis only one.

From the title, one would assume that the book was mainly about antibiotics but information not relevant to antibiotics is often more prominent. Seven pages are devoted to

bacteraemia, septicaemia and septic shock; only two of these are concerned with antibiotics, the others with concise statements on pathophysiology or long lists of organisms causing septicaemia.

Finally it dawned on me. This is a book by clinicians for clinicians. It is not meant to be picked over and criticised by microbiologists. This is an "On-the-spot guide for health care workers"—reminding them to catch that dog and section his hippocampus, to continue decongestants for 7 days after completing the antibiotic, and that antibody-coated bacteria may be found in the urine by fluorescence microscopy. It is mostly trite but true. For this purpose it has a valuable place. I hope that lots of clinicians will buy the book because it will encourage them to learn more about the management of infectious diseases. There is little in it for the laboratory worker although microbiologists with a lot of clinical duties may find it useful.

J. D. WILLIAMS