Book Reviews

Acid-Base Disorders, H. Valtin and F.J. Gennari. Pp x+195, illustrated. Little, Brown & Co, Boston, Toronto, 1986. £14.95.

This book provides an excellent and concise guide to understanding acid-base disorders. Clearly this is necessary for their rational management. The first three chapters discuss the physiology and biochemistry of acid-base balance. The basic principles and the homeostatic mechanisms regulating acid-base balance are clearly and logically formulated. These chapters are the strongest in the book and make what is often a difficult area comprehensible.

The remaining chapters are devoted to clinical syndromes of acid-base disorders. These provide clear guidelines to the diagnosis and management of these disorders and the illustrative case histories are particularly useful. The chapters in the book are appropriately referenced and the index is accurate.

This book works well as an introduction to acid-base disorders. The authors are American and use partial pressures for blood CO_2 and O_2 concentrations. To the British reader used to kilopascals this appears quaint and induces a certain nostalgia. Likewise the use of both pH and H^+ concentrations in nanomoles can, I feel, only generate confusion.

The book is well worth reading if you have ever had any anxieties about managing a patient with an acid-base disorder and at £14.95 is very good value.

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Aspects of Hypoxia, edited by Donald Heath. Pp x+254, illustrated. Liverpool University Press, Liverpool, 1986. £28.

This book looks at the effects of acute and chronic hypoxia on the pulmonary vascular system, the carotid body and placenta in pathological and physiological terms. The sixteen chapters have been written by specialists with a strong leaning towards pathology. The book gives a good summary of current thoughts and controversies and will be of interest to respiratory physicians, pathologists and physiologists.

The first chapter describes the electron microscopy of muscular pulmonary arteries and addresses the question of their numbers in states of hypoxia. In the second chapter, pathological changes of pulmonary veins are reviewed. Constriction is considered possible but there is doubt, at least in man, of its physiological significance. Pulmonary vascular changes in patients with chronic obstructive airways disease are important. Studies of changes during long term oxygen therapy are at last being reported. It was thought at one stage that long term oxygen treatment might reduce hypoxic pulmonary vascular changes. Alas, this is not the case. On the contrary there is evidence of continuing changes during therapy,

particularly in the intima of pulmonary arterioles. The physiological effects of long term oxygen therapy are reviewed by Professor Flenley.

The carotid body is considered in detail, hyperplasia in chronic hypoxia, its electron microscopy and histochemical features. Carotid body vasculature is extensively described and comparisons made with the appearances of the carotid body in systemic hypertension. These three chapters offer a good review of present knowledge. Almitrine, hypoxaemia and the carotid body were considered through pathophysiological studies in animals, mostly the rat. Almitrine bismesylate is an interesting chemoreceptor agonist.

Returning to man, consideration of the effect of hypoxia on endocrine organs is reviewed with the interesting finding that the hypothalamic testicular axis is depressed. Pulmonary endocrine cells are described and speculations made as to their function. Many increase numerically in hypoxia, particularly the neuro-epithelial bodies.

There are interesting chapters on the effects of hypoxia on the human placenta. Finally, a review of species effects in the pulmonary circulation at high altitude points to differences between man and animals. There are those who exhibit pulmonary vasoconstriction (like man and cattle) and those who have adapted after living for many millennia at high altitude to avoid pulmonary vasoconstriction (e.g. llama). There may be advantages for the latter. Finally, acute mountain sickness is reviewed with a short thesis on the site of action of hypoxia.

This is a well presented book of interest to the specialist researcher but other physicians and scientists will probably want to read it in the library. References are apposite and extensive.

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The Discovery of Insulin, Michael Bliss. Pp. 304, illustrated. Macmillan Press, Basingstoke, 1987. £25.

On October 31st, 1920, Banting wrote in his notebook, 'ligate pancreatic ducts of dog. Keep dogs alive till acini degenerate leaving Islets. Try to isolate the internal secretions of these to relieve glycosuria'. Thus began the saga that led to the discovery of insulin, a saga characterized by inept experimentation, unsubstantiated conclusions, bitterness, acrimony and personal feuds and above all, by success. This is a marvellous book, carefully researched and offering documented, and detailed information. The fascination of the story lies in the insight it offers into the actual day to day work in process, the problems to be faced and overcome and the interplay between the research workers, the university authorities and the pharmaceutical industry. Banting and Best were two young, inexperienced men, suddenly thrown into public adulation, and to a background of emaciated, dehydrated and dying diabetics reaching out their hands to them for life and

health. The story is told in a scholarly and compelling fashion and I recommend the book with enthusiasm.

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Hallucinations and Their Impact on Art, E.M.R. Critchley. Pp. 185. Carnegie Press, Preston, Lancs, 1987. £10.

Medicine attempts to analyse and understand the mind by study of it malfunctioning; and by giving insight into it functioning with supernormal sensitivity. This book combines these two approaches. It displays an amazingly wide ranging erudition. There are references to history, mythology and hagiography for example, not to mention an encyclopaedic knowledge of biographical detail and the private quasi-philosophical world of neurology together with an enviable sense of aesthetic values. The book, indeed individual sentences, bursts with information, three hundred references are included; much of this is fascinating, some of it wearisome – to read the chapter on synaesthesia, for example, is an exhausting experience. Esoteric language is used extravagantly – the reader will need both a large general dictionary and an equally large medical dictionary and be prepared to consult them frequently. All in all a brilliant *tour-de-force* but a flawed one because it overwhelms.

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How to do it: 2, many various authors. Pp. x+208. British Medical Journal, London, 1987. £6.95.

This paperback covers 34 activities in 208 pages. It is aimed at the doctor who has just finished postgraduate training. Such short sections have encouraged the tendency to trite advice and to omit the much more interesting pitfalls – rather like life at second-hand from a series of social workers.

Overall the book fails whereas it had some success when published as a series of articles. If a doctor needs help he would do better turning to a friend or other professional for comprehensive and up-to-date advice. In many instances the doctor might do best to learn for himself: A chapter like 'Choose a better word' by B.J. Freeman is far too short and 'Write for money' by Michael O'Donnell far too long.

There are exceptions. In a perfect Baconian essay, David Morris discusses 'Admit you are wrong'. This should be read by all, from those who have insufficient confidence to admit they are wrong to those who are perhaps too abjectly humble forever professing guilt. Secondly 'Retire' by David Smithers is a beautiful and unselfish lesson. At last evidence that not all doctors are completely obsessed with themselves. Finally, a good

example of a really practical new look 'Work abroad' by Anne Savage and Iain Wilson.

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The Knee Joint. A Clinical Guide, Philip Evans. Pp. x+188, illustrated. Churchill Livingstone, Edinburgh, London, Melbourne, New York, 1986. £5.95.

I enjoyed this unusual little book. Dr Evans has produced a well written and very readable account of the anatomy and function of the knee joint illustrated by excellent and singular line drawings. He conveys an infectious enthusiasm for the understanding of this most complex joint. His book is stimulating, instructive and entertaining, and a pleasure to read.

The volume should be bought and digested by everyone who may ever examine a knee, irrespective of their seniority. All will learn from it. It is an invaluable reference for guidance for the beginner, a source of reminder for the trainee and a concise summary of his knowledge for the pundit. There are small points of opinion which may provoke a quibble, but these are few. There is a useful bibliography and a glossary of terms used in the text.

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Listening to Gynaecological Patients' Problems, David Jenkins. Pp. vii+104, illustrated. Springer-Verlag, London, Berlin, Heidelberg, New York, Paris, Tokyo, 1986. £5.95.

This is an interesting approach to learning gynaecology and improving communication skills with patients. It emphasizes the art of listening to the patient and interpreting the history correctly. It does not intend to cover either clinical signs or investigations in any detail. The author has clearly understood the difficulties in taking a good history and the reticence of some patients to discuss symptoms which are embarrassing or of a confidential nature.

The chapters deal with symptoms, or groups of symptoms and each starts with a series of questions, an explanation or key to the question, a summary of the problem and a guide to management and often one or two references. Questions and their explanations are suitable and logical. The space devoted to the 'problem' varies and it is not always evident why. It is debatable as to whether this section might not have been omitted altogether – it is not included for every topic and in a small book such as this, it is difficult to adequately cover the subject without being too simplistic. The references are helpful but for postgraduate study they are too few and too many are