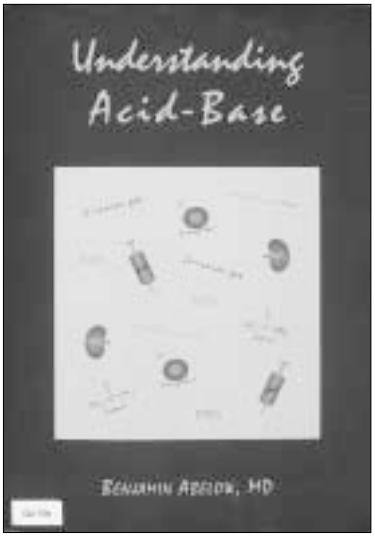
NEW TITLES



Williams and Wilkins: Baltimore; 1998.
ISBN 0683182722

This book begins with the statement 'acid-base is one of the most important and difficult areas in medicine'. I have always felt that the difficulty reflected in part the efforts of a generation of research physiologists and biochemists, who enveloped the subject in an almost mystical layer of impenetrable linguistics, arcane diagrams, and mechanistic uncertainty. Over the years there have been some seriously bad books on acid-base balance. In his introduction, Dr Abelow makes strong claims to have removed these barriers to understanding: 'The reader comes away from each topic with a deep, conceptual understanding...and a real sense of confidence and mastery.' The specific strengths of this volume are claimed to be a lack of jargon; a return to basic fundamentals; a compartmentalised structure to allow 'dipping in'; strong emphasis on self-assessment; and optional footnotes and appendices which expand the 'core text'. How do these assertions stand up?

Certainly the language is often endearingly informal. For example, a footnote advises the reader to remember that cations have a positive charge because the 't' in cation is like a stretched-out '+' sign. Sometimes it verges on the trivial: 'ethanol - yes ethanol!'; or comparing a pair of buffers to a pair of pants. Overall, however, it is a worthy attempt to use less specialised language and make the concepts accessible. The illustrations are less impressive. They are rather few in number relative to the text, in black-and-white only, and the standard 'rectangle with lots of letters and arrows' approach is much in evidence.

What about the 'back-to-basics' approach? This is well done, although lengthy textual explanations of relatively simple ideas can become tedious. The compartmentalised structure is both a strength and weakness. Certainly a reader only interested in the physiology of acid-base would simply read Chapters 7-13. However, it gives the book a disjointed feel. The separation of pathophysiology, diagnosis and treatment in discrete sections means that a condition such as renal tubular acidosis is visited again and again from different perspectives, and one never really gets an overview of it as a clinical problem.

Self-assessment is a strength of the book. Many of the questions seem relatively difficult even if one has read the book - I would say the level is somewhat above MRCP standard.

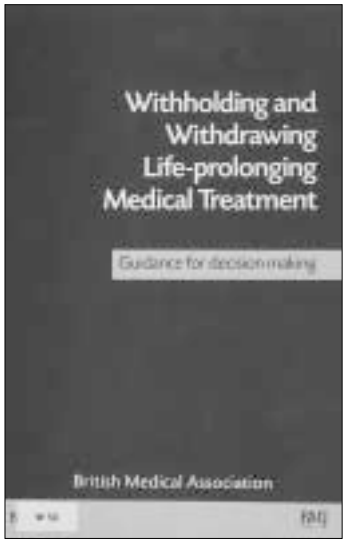
Ideally I would have liked more about recent advances in the molecular biology of the kidney in relation to acid-base regulation. There is no mention of sodium and potassium channels in the distal nephron, for example. Bartter's syndrome is mentioned only in passing. While it is rare, it is a classic paradigm for renal alkalosis. The molecular abnormality is now fully established, allowing it to be distinguished from the similar phenotype of Gitelman's syndrome, which is not mentioned at all.

I would not read this book to learn how to treat acid-base disorders. Practical information is notably absent. For example, treatment of diabetic ketoacidosis is described without guidance on dose of insulin. The author makes this intent explicit, and directs the reader to 'therapeutic manuals'. Given the level of detail elsewhere, this stance is rather pedantic.

Even after reading the book, a key question remains unanswered, namely the spelling of 'Henderson-Hasselb'..., as in the equation. The text has 'Henderson-Hasselbalch' throughout, but the index has 'Henderson-Hasselbach'. I believe the former to be correct, but one still sees the latter widely used. Since Dr Hasselbalch did much to confuse generations of students of acid-base, by introducing the negative logarithm to Henderson's much simpler version in 1916, it seems not too tragic that his name is often mis-spelt.

In summary, eight out of ten for effort, and probably the best book around at the moment for an MRCP candidate, or even a very enthusiastic undergraduate, who is struggling with acid-base concepts. But it could be so much better....

Dr Allan Cumming



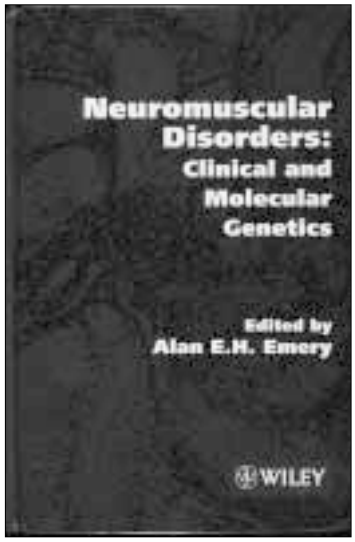
BMJ Books: London; 1999.
ISBN 0727914561

At present there is no clear and comprehensive guidance on withholding or withdrawing life-prolonging medical treatment from patients with no prospect of recovery from very severe brain damage (except legal rulings related to PVS), or from progressively deteriorating terminal conditions.

This BMA report aims to provide such guidance. It argues that the goal of medicine is not to prolong life at all costs, but to benefit the patient's health with minimum harm: the point is not whether withholding or withdrawing treatment can be justified, but whether the net benefit of this treatment to this patient justifies making or continuing with this intervention. The report offers specific guidance on decisions involving 'adults who have the capacity to make and communicate decisions', adults who lack this capacity, babies, and children, and on decisions about withholding or withdrawing artificial nutrition and hydration. It includes guidance on advance directives and on assessing competence (given in greater detail in two 1995 BMA reports), as well as on English and Scots law related to children and to PVS.

In all respects this well researched and written report succeeds in its aim of giving both clear and comprehensive guidance. This is done mainly by restating and relating to the realities of everyday practice, existing legal rulings and professional advice on matters (for example the role of relatives in decision-making) which are sometimes imperfectly understood. Aiming to reduce legal uncertainty, the report also recommends that all decisions to withhold or withdraw artificial nutrition and hydration (including but not restricted to those involving patients with PVS, which in England but not Scotland currently require legal review) should be subject to formal clinical review. This report makes the medico-legal and ethical aspects of the decisions it discusses much easier to understand, but no less difficult to take.

Dr Kenneth M Boyd



John Wiley & Sons: Chichester; 1998.
ISBN 0471978173

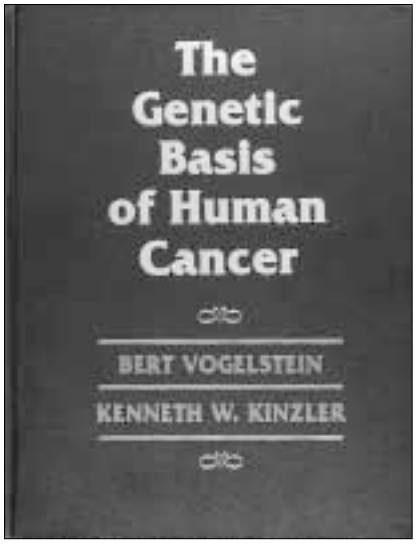
As a medical student I was fortunate to hear Alan Emery lecture on Medical Genetics, and recall the clarity and enthusiasm that he gave to his subject. The massive expansion in molecular biology that has taken place over the past decade has increased our understanding in many areas, but perhaps none greater than the field of neuromuscular disorders. In this relatively compact book, Professor Emery has brought together a group of 46 international experts who review the clinical and genetic aspects of a variety of neuromuscular disorders.

There is a heavy emphasis on muscular dystrophies and other genetically transmitted disorders of muscle and nerve, including mitochondrial disorders, ion channel defects, genetic polyneuropathies and motor neurone diseases. It was at first sight surprising to find a short final chapter on the post-poliomyelities syndrome, but this is at least partially justified by the exploration of a possible genetic susceptibility to poliomyelitis. All the chapters contain at least some description of the clinical aspects of the disorders discussed, although the emphasis is very much tipped towards the molecular genetic aspects, and therapeutic considerations are given only brief mention for most of the disorders.

The book is concise and carefully edited. Illustrations are monochrome: line drawings, good clinical photographs and photomicrographs. The text is easily readable and printed on high quality paper. Each chapter is extensively referenced, with many cited papers coming from the past five years.

Because most of the disorders described in this book are relatively rare and have a complex, albeit fascinating, molecular genetic background, it is perhaps not suited to casual browsing. It is, however, an excellent résumé of the recent advances in the inherited disorders of nerve and muscle, which will be of considerable value as a reference text for neurologists, paediatricians and clinical geneticists.

Dr Roger E Cull



McGraw-Hill: New York; 1998.
ISBN 0070675961

This is a handsomely-produced, almost coffee-table style book, edited by two of the foremost authorities on the molecular genetics of human cancer and counting many more household names in the field among its contributors. Why then does it rate no more than five on a scale of nought to ten?

First, it is an example of salami publishing on a grand scale. All but five of the 43 chapters are 'adapted' from *The metabolic and molecular bases of inherited disease*, either the hardback version (1995) or the CD-ROM version (1997) issued under the same imprint. Hence, most of the material has already been available elsewhere for quite some time.

Second, there seems to have been little serious attempt to update the content. At considerable cost, this book offers a reasonably comprehensive survey of the molecular biology and genetics of cancer as it was in 1996. However, much has happened since then.

Third, despite the previous incarnations of most chapters, a uniform style of presentation has not been achieved. Many begin with formally annotated key messages and a number end with a summary; some do both - but several do neither. Likewise, the index might be expected, by now, to be extensive and accurate. Instead, it is barely adequate. A number of figures suffer from being reproduced here in shades of gray, rather than their original full colour, and occasionally attention is drawn to this failing by unamended reference to colours in the legends.

It would be churlish not to acknowledge that certain topics are covered superbly. The opening three chapters, 'A human genetics primer', 'The human genome project and its impact on the study of human disease' and 'The nature of human gene mutation' provide as good an introduction to the field as one could hope to find. Chapters 8 and 9, 'Control of the cell cycle: an overview' and 'Apoptosis and cancer' are equally commendable. The six chapters on DNA instability syndromes (here collectively entitled 'Defects in caretakers', in accordance with the editors' useful but controversial classification scheme) are outstanding, while two of the new chapters, on multiple endocrine neoplasia Type 1 and on Cowden's syndrome, are notably more up-to-date than most others (surprisingly, however, the section on familial breast cancer has not been modified to take some account of this last chapter).

There is an apparently logical plan to the overall organisation of the contents, with four major subdivisions: 'Basic concepts in cancer genetics'; 'Controls on cell growth'; 'Familial cancer syndromes'; and 'Cancer by site'. The first two correspond roughly to the molecular and the cellular basis of cancer while the last two should encompass, respectively, the Mendelian and the somatic cell genetics of cancer. In practice, the two aspects of cancer genetics have cross-fertilised each other to such an extent that it is difficult to give a coherent account of either in isolation. This leads inevitably to uneasy compromises whereby, for example, colorectal cancer is covered in two separate chapters within the 'Familial cancer' section, one concentrating on the hereditary non-polyposis syndrome, the other on adenomatous polyposis coli, and both discussing somatic molecular changes that accompany both sporadic and familial forms of the tumour. Conversely, ovarian, endometrial, pancreatic, stomach and prostate cancers are all included in the 'Cancer by site' section with nods towards germline mutations associated with familial susceptibility, serving mainly to highlight the disadvantages of producing a book with such a time-lag between writing and production.

Whilst the book may almost justify its price (£72.99) for those things it does well, the reader wishing to be better informed about familial cancer syndromes will find at least four smaller, more up-to-date, better written, more informative and cheaper competitors on the market. The 'standard' overviews on oncogenes, tumour suppressor genes and chromosome aberrations in human cancer are looking tired and treading on each other's ground - a sure sign that major revision is overdue. The chapter on chromosome rearrangements in solid tumours is particularly unconvincing, with obvious discrepancies between its massive tables and its own text.

If salami publishing is the shape of things to come then perhaps we, as customers, can retaliate with pick'n'mix purchasing. Given the chance, I would whittle this book down to one third of its size and then give it a score of nine out of ten.

Professor Michael Steel