BOOK REVIEWS

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With the rapid increase in mapping and cloning of genes for many human diseases, molecular and prenatal diagnosis becomes technically possible. Newer methods, such as interphase FISH for prenatal diagnosis of chromosomal anomalies, are now beginning to emerge on the clinical scene. Faced with the prospect of being superseded almost immediately, the production of a textbook covering such an expanding field is a daunting task.

Undaunted, Boute et al have written a comprehensive textbook that covers a wide range of topics. Those sections include basic cytogenetic and molecular genetics, as well as a wealth of advice on procedures that are involved both in prenatal sampling and in sample analysis. The book does not set out to cover all the areas of fetal medicine, and issues such as ultrasound based diagnosis, immunology, or exchange transfusion are not specifically excluded. However, the use of prenatal diagnosis in the management of maternal viral infection is covered, with detailed discussion of the relative merits of specific diagnostic tests. It is a pleasure to read the text that is a great resource of practical experience in prenatal diagnosis in France has been brought together, and that the authors have a deep understanding of the problems and pitfalls in fetal medicine.

The book is aimed at obstetricians, general practitioners, and paediatricians, to help them address the questions asked by their patients. There is an appropriate emphasis on detection of chromosomal aneuploidies, but the short section on maternal serum screening does not discuss the improved detection brought about by triple marker screening. A larger chapter on prenatal diagnosis of single gene disorders covers both biochemical and DNA based diagnosis of a wide range of conditions. For some diseases, there are discussions of the clinical genetic issues for families at different degrees of risk. There is a considerable amount of detail on the specific DNA markers used in different monogenic conditions. All the markers mentioned are RFLPs analysed by Southern blot, so in many cases have now been superseded by PCR based microsatellites, of which there is not mention. The amount of technical detail may be somewhat overwhelming for the general reader, especially as such detail must inevitably become outdated. There is only a brief reference to PCR in the section on molecular methods, which is unfortunate, as PCR is not the mainstay of DNA technology in molecular diagnostic laboratories.

The editor has wisely included a chapter on ethical issues in prenatal diagnosis, and focuses on the ethical implications of "screening" for genetic disease in selected population. The editor is President of the French National Consultative Committee on Ethics. Boute also rightly emphasises that prenatal diagnosis needs a multidisciplinary approach, including obstetricians, clinical and laboratory geneticists, and ultrasonographic expertise.

This textbook also draws together information from different disciplines, and has successfully covered a large area of the management of pregnancies at increased risk of disease. Even though the editor accepts that the volume will rapidly be superseded, he believes that this textbook will remain valuable for a considerable time to come.

ANDREW GREEN


There is much evidence that persistent sleep disturbance is very common and that it can have serious psychological or even physical effects, and yet this topic is often marginalized or ignored in professional teaching and training courses. Sleep disturbance specific to children generally receives even less attention. However, this book would provide a clinician


Champions of the electronic age claim that reference books are now outdated, to be replaced by online databases and CD-ROM based information retrieval. This new edition of a well known and comprehensive catalogue shows that there is still a place for high quality, well indexed, and up to date reference books. The author has built on the work of previous editions to produce a clear and well referenced book covering the teratological effects of many pharmacological agents, as well as physical agents, maternal viral infection, pesticides, specific occupations, and even such events as a maternal suicide attempt.

The style is reminiscent of other publications from the Johns Hopkins University Press, and the book has been generated by a computer program rather than to produce another major catalogue. Mendelian Inheritance in Man. For each entry there is a presentation of the relevant data in sequence, starting with human epidemiological studies, thence to case reports of teratogenic effects in humans, and finally to animal experiments, followed by a comprehensive reference list. The author wisely does not attempt to classify an agent into a specific grading of severity, but cites the data and allows the reader to make an appropriate interpretation. For some agents, he may preface the entry with a clear, brief summary of the issues for pregnant women.

The individual teratogenicity of illegal drugs is well covered. The practical issue of distinguishing between these drugs in a mother who takes several such drugs together is often more difficult to address. The teratogenicity of newer designer hallucinogens is as yet unknown, especially with the variable purity of such agents. The same caveat must also apply for new medicines coming onto the market, as their human teratogenic effects are as yet unknown, and cannot be covered in a catalogue such as this. The point about species variation in thalidomide teratogenicity is well made.

Specific entries dealing with issues such as folate deficiency, anticonvulsants, and cytotoxic agents are clear and to the point. There are the odd translatables differences in nomenclature which make tracking a particular agent difficult, but once found the data are well presented. There is a good and interesting entry on the teratogenicity of video display terminals, and Shepard quotes that it is a "shame that we may be terrorizing a generation of women without a clear scientific imperative to do so". This is the only instance where an opinion is offered, an opinion that I could find, which reflects the clear thinking and scientific approach of the author.

I would recommend this book for its breadth of entries and clarity of presentation. It shows that there is still a place for a good book in a world of electronic information.

ANDREW GREEN
I dipped into this book, jealously prepared to find fault with it. Alan Emery has already written two books on muscular dystrophy, and this was the book I had meant to write when I retire. I soon stopped dipping and read it through. It has none of the textbook character of his previous writings. It is my book but much better than I would have written. Marcia Emery has added a hugely important dimension in her work on the 19th century history of the subject. Together, their account of Edward Meryon and his contribution at last does justice to the man and goes far to justify the recent efforts in this country to use "Meryon's disease" as a catch-all eponym for all forms of X linked dystrophin deficiency. Much original work has gone into the biography of Meryon and all libraries of the history and biography of medicine should have this book for this reason if for no other. There is less that is new here about Duchenne, but the authors have done him justice too, and I believe have got the balance right in their assessment of the contributions of these two men. But surely, I hoped, they won't have discovered the running controversy between them, carried out in footnotes, and obscure passages of Duchenne's massive "De l'Electrisation Localises" in its second and third editions? But yes they have. Or found William Gowers' reference to his information on the later family history of Meryon's first case "the Hon George P"? But yes they had. Or found that among Duchenne's cases (Case CII, De l'Electrisation Localises, 3rd ed, 1872: 612-15) a mother had affected sons by two fathers thus providing us with retrospective evidence of X linkage? Well, no they hadn't, but it is not such a critical point after all. But not only is the 19th century story wonderfully well told, but is seamlessly continued to the present day (a 1994 reference to "Emery-Dreifuss dystrophy being excusably added in proof). Emery's clear but detailed account of the step by step development of our understanding of Duchenne muscular dystrophy (with briefer accounts of other dystrophies) is masterly and full of deep insights about the relative importance of the many men and women who have provided the critical advances or triggered the critical scientific debates. Everyone who has made an important contribution to the history of this disease, including several subscribers to this Journal, will find their name in the author index, and for many of them there is interesting biographical detail. But more importantly than that is the way in which Emery has fully grasped the many stages at which advances in Duchenne muscular dystrophy have reflected or pioneered the progress in genetics and has woven them together to make an important contribution to the history of genetics as a whole. This is a book which geneticists with any hankering after history should own; it deserves to become a collectors' piece. But it also contains enough explanation, without being didactic, to appeal to the much wider readership which it deserves.

DAVID GARDNER-MEDWIN

NOTICE

Gene Therapy of Cancer, AIDS and Genetic Disorders

The International Centre for Genetic Engineering and Biotechnology will be holding the above symposium on 10-13 April 1996 in Trieste, Italy. For further information contact Ms Elisabetta Lippolis, ICGEB, Padriciano 99, 34012 Trieste, Italy. Tel: +39-40-3757332, fax: +39-40-226555.