

Technology in blood transfusion

Clinical Haematology. Vol. 3 No. 2. Blood Transfusion: The Impact of New Technologies. Ed. by Marcela Contreras. Pp. x + 482. Illustrated. R22,50. Kent: Harcourt Brace Jovanovich. 1990.

The discipline of blood transfusion has become one of the most important facets of modern medicine. Indeed, many of the advances in medicine have become a reality only because of the availability of blood and blood products.

HIV has also, as in other health care disciplines, had a major impact on blood transfusion. Blood donors only reflect the prevalence of HIV within a select segment of the population at large. Blood transfusion should therefore not be regarded as a cause of the spread of AIDS. Nevertheless, the very real possibility of transmitting the HIV by transfusion of blood and blood products has quite rightly had a major influence on the development of new techniques for the rapid and accurate screening for the presence of this virus in blood products.

This volume of Baillière's series in clinical haematology focuses on the impact of automation and other new technologies on this and other topics of major importance to the practice of transfusion medicine.

The chapters are generally very well written and give most useful accounts of such diverse subjects as monoclonal anti-Rh, treatment of haemolytic disease of the fetus, typing of HLA Class II genes, genetically engineered plasma proteins, novel intravenous globulins and their applications, and intra-operative blood salvage. The volume should therefore be of considerable interest to a wide variety of professionals in health care disciplines.

I found the volume particularly useful because it is difficult to find up-to-date reviews of the literature of many of these subjects.

I strongly recommend this volume as essential reading for all those involved in blood transfusion. However, it will be a pity if the relevant chapters are not also read by surgeons, obstetricians, paediatricians, virologists and microbiologists.

A. du P. Heyns

Oncology

International Classification of Diseases for Oncology. 2nd ed. Ed. By C. Percy, V. van Holten and C. Muir. Pp. xiv + 144. Geneva: WHO. 1990.

The *International Classification of Diseases for Oncology* (ICD-O) evolved as an expansion of previous code books. This is the second edition of the ICD-O, the first, published in 1976, was based on the *International Classification of Diseases*, 9th revision (ICD-9).

In this edition one of the primary commitments of the editors was to change as few terms as possible, and to add new terms at empty spaces. New terms were not added unless there were at least two publications in the literature describing these entities. As for the first edition, extensive field testing was undertaken. Topography, based on ICD-9 was retained and new morphological terms are identified by bold print.

The new section on non-Hodgkin's lymphoma is of particular importance. The behaviour code is essentially unchanged from that of the first edition, but the code for histological grading and differentiation has been expanded to identify T- and B-cell involvement for lymphomas and leukaemias.

This code book is an essential reference work for tumour registries, pathologists and clinical oncologists, and should serve to promote international co-operation in the field of cancer management and research.

C. I. Falkson

Chronic fatigue syndrome

Chronic Fatigue Syndrome: The Struggle for Health. Ed. by Jay A. Goldstein. Pp. xiv + 177. Illustrated. Beverly Hills: Chronic Fatigue Syndrome Institute. 1990.

This book has been written, according to the author, 'to help people get better'. He has directed it at persons with the chronic fatigue syndrome (CFS) and 'enlightened doctors', presumably those who share his opinions.

Dr Goldstein writes that he is both a physician and researcher, trained in psychiatry and family medicine. He works in the Anaheim Hills Pain and Stress Management Center and the CFS Institutes located in Anaheim Hills and Beverly Hills, California, with an extensive private practice consisting primarily of patients with treatment-resistant disorders. He has treated almost 2 000 patients with CFS. In his own words one of the things he does is 'to invent new treatments'.

Apart from producing this book, which the reader is assured contains much that 'is awaiting publication in medical journals', Dr Goldstein contributes regularly to the *CFIDS Chronicle*, the journal of the Chronic Fatigue and Immune Dysfunction Syndrome (CFIDS) Association.

The author regards the conventional route of medical publication as time wasting and not in the patients' best interests. He prefers to 'help people get better' by publishing his concepts, research and advice in a 'non-peer-review publication', which will not endear him to the purist.

Poor referencing in the book makes it difficult for the reader to differentiate fact from theory. In the sections on therapy, anecdotal remedies cannot easily be separated from scientifically proven treatment. The author makes his disdain for double-blind controlled studies very apparent.

Dr Goldstein is also critical of the Centers for Disease Control's case definition of the CFS, which is certainly of value to the practicing clinician. Unfortunately he produces yet another check list to assist persons in the self-diagnosis of the CFS.

Dr Goldstein's book, which suffers from the disadvantage of not having an index and being at times repetitive, is required reading for workers in the CFS field. The author is highly thought of by the many intelligent sufferers of this debilitating condition and the book will almost certainly be read avidly by such patients.

F. H. N. Spracklen

Respiratory medicine

Respiratory Medicine. Ed. by R. A. L. Brewis, G. J. Gibson and D. M. Geddes. Pp. xxi + 1559. Illustrated. R85. London: Baillière, Tindall. 1990.

The list of contributors to *Respiratory Medicine* sounds like a British *Who's Who* in respiratory medicine. The editors took great care in selecting knowledgeable authors for every chapter. They therefore succeeded eminently in producing a text that succeeds in its stated aim — to produce an authoritative and up-to-date multi-author text that reflects the best British tradition by combining applied science with good clinical practice.

The contents cover the topics in a well-planned way. The illustrations, when used, supplement the text and makes reading easy. The chapter on asthma is especially good and up to date. It will give the student in pulmonary medicine a sound background, and for more advanced readers it can only give pleasure to read such a well-planned chapter on a topic so important to respiratory medicine.

The text could be improved by:

- More information on the more modern diagnosis of tuberculosis. The latest developments in this field have not been covered.
- The chapter on drowning gives a very superficial review of the problems, and more practical facts could have been given, especially in the handling of the acute case.
- The discussion on chronic obstructive pulmonary disease is not as good as the discussion on asthma. The start of this section could have included the problem of chronic airflow limitation.
- In the light of the ever-increasing numbers of aged, no text on respiratory medicine should be considered authoritative unless it discusses the problems of senescence of the lungs, especially since the authors have laid emphasis on developmental problems.
- In a state-of-the-art text the applications of electromagnetic resonance to the diagnosis of mediastinal abnormalities should have been included.

It was a pleasure to review this text, and it can be recommended not only for physicians interested in respiratory medicine, but also for students studying for higher examinations and practitioners who want to have an up-to-date review of practical problems in chest medicine.

D. J. V. Weich

Cardiac hypertrophy and failure

Research in Cardiac Hypertrophy and Failure. Ed. by B. Swynghedauw. Pp. xvi + 696. Illustrated. £65. London: John Libbey. 1990.

There are few books that set out to cover the whole area of cardiac hypertrophy and failure, starting from molecular biology and working through to clinical manifestations and treatment. This book, largely French and Continental-based, is the most ambitious and most useful of books currently available. It proves the statement by Louis Katz quoted on page 125 that 'the hypertrophied heart is not a simple version of an enlarged normal heart'. As background to this statement, there are excellent descriptions and figures of the cardiac sarcomere (page 106), of the interaction between actin and myosin (page 110); the sodium pump (page 175); the β -receptor (page 187); the calcium channel (page 205); the proteins of the sarcoplasmic reticulum, including phospholamban, the calcium ATPase, and the calcium release channel (page 215); and the links between the extracellular matrix and the nucleus via desmin and tubulin (page 288). The latter are part of the cytoskeleton and may link the membrane receptors (the integrins) with the cytoskeletal proteins and thereby act as an important link between stretch and hypertrophy. These and other aspects of molecular biology are well covered, although the non-expert would benefit from a glossary and explanation of some of the terms. With benefit, many of the concepts could have been started at a more elementary level, which would have given the book a wider appeal.

Coming to heart failure, there is a good analysis of the relationship between atrial natriuretic peptide and angiotensin-II with an excellent figure on page 487. Positive inotropes are illustrated on page 573 and the role of rest and a salt-free diet, not often discussed in relations to cardiac therapy, can be found on page 621.

There are many chapters with analysis of the mechanical forces acting on the heart to cause it to hypertrophy, but the actual mechanism whereby stretch may be involved does not have a separate evalu-

ation, although it is discussed on pages 28 - 31. An overall figure of RNA transcription and processing would have been helpful.

In the version provided for review, pages 436, 437, 444, 445 and 452 had a poor print quality and 437 and 444 were virtually illegible.

In summary, this is an important book, ambitious in its scope, encompassing molecular and clinical aspects of myocardial hypertrophy and failure, but with a certain scope for improvement in future editions. There would be few academic cardiology units that would not benefit by acquiring this book for their libraries.

L. H. Opie

Reconstructive surgery in gynaecology

Reconstructive Surgery in Gynaecology. Red. deur P. G. Knapstein, V. Friedberg and B-U. Sevin. Pp. xii + 281. Illustrated. DM 298. Stuttgart: Georg Thieme Verlag. 1990.

Hierdie besondere atlas verskaf belangrike inligting aan die ginekoloog, die plastiese chirurg, die algemene chirurg met belangstelling in mamma-rekonstruksie, en die uroloog.

In die eerste hoofstuk word die beginsels van rekonstruktiewe chirurgie verduidelik en verskillende tipes velflappe word aangetoon. Z-plastie en W-plastie word ook bespreek. Die tweede hoofstuk begin met kleiner operasies aan die vulva en vagina, waar littekens verwyder word, of waar die opening verwyd word. Dit eindig met ingrepe waar groot defekte, wat na major chirurgie ontstaan het, weer met vel bedek word. In die derde hoofstuk word die verskillende tegnieke vir die herstel van 'n afwesige vagina bespreek. Vervolgens word rekonstruktiewe prosedures van die uterus bespreek, byvoorbeeld miomektomie en die herstel van 'n uterus bicornis. Mikrochirurgie aan die buise word vervolgens stap vir stap verduidelik. Aandag word ook gegee aan rekonstruksie van die bekkenvloer. Vervolgens word die verskillende kosmetiese operasies aan die mamma breedvoerig verduidelik. Laastens word urinêre omleiding en anastomoses van die derm bespreek.

Die outeurs maak deurlopend gebruik van duidelike illustrasies wat die beginsels van die operasies aantoon. Daar word ook vrylik van pragtige kleurfoto's gebruik gemaak wat pre-operatief, intra-operatief en postoperatief geneem is. Opvolgfoto's toon die goeie resultate van baie van die operasies aan. Omdat hierdie boek waarskynlik te duur sal wees vir die voltydse konsultant om aan te skaf, is dit noodsaaklik dat biblioteke van alle mediese skole en groot hospitale dit aankoop.

H. Odendaal

Menslike anatomie

Basiese Menslike Anatomie. Red. deur Linda de Jager. Pp. 204. Illustrated. Wetton: Juta. 1990.

Die Afrikaanssprekende anatomiestudent is steeds grootliks op Engelse handboeke aangewese. Vandaar dan die entoesiasme waarmee 'n Afrikaanse anatomiehandboek begroet word.

Met die samestelling van 'n Afrikaanse handboek, wat soos hierdie boek op die nie-mediese student gerig is, word die skrywer met etlike probleme gekonfronteer wat op die volgende wyses deur Linda de Jager gehanteer is: 'n sistematiese benadering [waar elke stelsel op sy eie behandel word] is in teenstelling met die meer konvensionele regionale benadering [waar die anatomie in streeksverband behandel word] gebruik. Hierdie benadering korreleer goed met die anatomiekursusse wat vir die nie-mediese student aangebied word.

Die vlak waarop die boek geskryf is, is soos die naam aandui, van 'n basiese aard. Sekere nie-mediese kursusse sal meer kennis en ander minder kennis in 'n bepaalde onderwerp benodig. 'n Goeie ewewig word behou.

Meningersverskille bestaan onder anatome of die nomina anatomica teenoor die verafrikaansde vaktaal as die gewenste skryfwyse gebruik moet word. In hierdie boek is die verafrikaansde skryfwyse deurgaans met goeie resultaat gebruik.

Die huidige uitgawe van *Basiese Menslike Anatomie* volg op die eerste uitgawe van 1984. Verskeie verbeterings is aangebring. Die sketse veral is van 'n baie beter kwaliteit en kom ook meer professioneel voor.

J. H. Meiring

GIFT: from basics to clinics

GIFT: From Basics to Clinics. Red. deur G. L. Capitanio, R. H. Asch, L. de Cecco and S. Croce. New York: Sero Symposia Publications from Raven Press.

Die boek getiteld *GIFT: From Basics to Clinics* is 'n uitstekende uitgawe wat handel oor die basiese fisiologiese beginsels rakende die manlike en die vroulike gameet. Embriologiese aspekte en kliniese data van GIFT-behandeling word bespreek.

In die kliniese afdeling word interessante resultate, nuwe perspektiewe en probleme weergegee. Protokolle vir ovulasie-induksie word vergelyk, asook die invloed van ovummatrasie op swangerskapsuitkoms.

Opsomming kan gesê word dat hierdie simposium, soos vervat in die boek, 'n 'moet' is vir alle reprodutiewe bioloë, wetenskaplikes en ginekoloë geïnteresseerd in hierdie veld.

T. F. Kruger

Environmental health

Environmental Health Criteria. No. 88: Polychlorinated Dibenzo-para-dioxins and Dibenzofurans. Pp. 409. Illustrated. Geneva: WHO. 1989.

The tricyclic aromatic compounds discussed in this document do not occur naturally but are thought to be ubiquitous in the environment, mainly as a result of thermal degradation by combustion and disposal of industrial waste of processes which utilise polychlorinated bi-phenyls (PCBs), chlorophenols, and benzofurans (PCDFs).

The polychlorinated dibenzo-p-dioxins (PCDDs) are perhaps better known because of accounts of the implications of the use of Agent Orange as a defoliant, while incidents in Seveso (1976), and Missouri (1971) have led to widespread concern.

The main well-established effect on humans is the development of chloracne, although so-called 'Yusho' disease (1968) involved other acute toxic effects as a result of ingesting contaminated rice. Disturbance of liver function and the immune system has been described, carcinogenicity and adverse effects on reproduction mooted. As the compounds occur widely, the general population may carry a body burden, the significance of which is not properly known.

This document offers a wealth of scientific information to interested people and recommends further studies. It has a summary in French.

Environmental Health Criteria. No. 98: Tetramethrin. Pp. 69. Illustrated. SFr. 11. Geneva: WHO. 1990.

Tetramethrin is one of the synthetic pyrethroids, used as pesticides, which are rapidly degraded in the environment. It is much less toxic to man and animals than pesticides based on organophosphorus and chlorinated hydrocarbon compounds, which are widely used at present. There is comparatively little bio-accumulation of these pyrethroids, and few adverse effects on occupationally exposed people have been reported.

It is known, however, that some of these substances, which carry a particular a-cyano group, do have some neurotoxic effects, especially in invertebrates, but probably of minor significance in man. The document provides clear information and has a summary in French.

Environmental Health Criteria. No. 100: Vinylidene Chloride. Pp. 187. Illustrated. SFr. 20. Geneva: WHO. 1990.

This issue, No. 100 in the series of *Environmental Health Criteria* prepared under the International Programme on Chemical Safety (IPCS) published by the WHO, deals with vinylidene chloride, a substance used in producing chlorinated solvents and co-polymers used in the packaging and building industries.

It is estimated that about 5% escapes into the air. The substance has a half-life of about 2 days in the environment. It is an irritant and also hepatotoxic, neurotoxic, nephrotoxic and possibly carcinogenic. The risk to health, however, is not considered to be very high even for 'controlled' occupational exposure nor for the general population, which is exposed to very low levels in air, drinking water and food in industrialised areas.

The document is clearly set out, contains summaries in French and Spanish and is well worth its place in libraries concerned with environmental health.

J. T. Mets

Genetic engineering

Reshaping Life: Key Issues in Genetic Engineering. 2nd ed. Ed. by G. J. V. Nossal and Ross L. Coppel. Pp. xii + 179. Australia: Cambridge University Press. 1989.

It is important that the potential and the limitations of genetic engineering be made accessible to a wide public. The aim of this book is to present the essential elements of genetic engineering in a manner requiring no background in biology and for a readership with no technical expertise in the field.

The authors have succeeded in describing the bare essentials of biological organisation and how genetic engineering works in two chapters. Thereafter they deal with practical applications and social implications of this extraordinary turning point in humanity's affairs. They explain how hormones and other proteins can be mass-produced, and how purified genes can help diagnose hereditary and other diseases. They speculate how good genes may be substituted for bad ones, and there is an excellent discussion on the potential uses of genetic engineering in agriculture, chemistry, mining and waste disposal.

This book is intended for decision-makers at many levels; politicians, financiers, academics in non-biological fields and, in particular, the general practitioner who will find in this slim volume excellent reading on key issues now so important in medicine.

A. E. Retief

Doctor-patient communication

Talking With Patients: A Basic Clinical Skill. Ed. by Philip R. Myerscough. Pp. 1 + 148. Illustrated. Oxford: Oxford University Press. 1989.

Writing books and articles on doctor-patient communication is becoming a growth industry. What niche does this book seek to fill?

Essentially, the author, a deputy chief of obstetrics and gynaecology services in the Sultanate of Oman, is writing for junior medical students embarking on clinical work.

In the first nine chapters he examines the basic aspects of verbal and non-verbal communication, as well as diagnostic problem-solving, within the clinical context: in the second half his colleagues assist in examining communication in specific contexts, for example, children, adolescents, the elderly, and the dying. Sadly enough, his section on transcultural communication — so vital in today's world of multilingualism and multiculturalism — is modest in scope, and insufficient for our local needs.

With staff, students and libraries having to watch every cent, I doubt this book justifies the expense.

Eleanor S. Nash

Books Received

Exercise in Health and Disease. 2nd ed. By Michael L. Pollock and Jack H. Wilmore. Pp. xiii + 741. £28,50. London: Harcourt Brace Jovanovich. 1990.

Cancer Treatment. 3rd ed. by C. M. Haskell. Pp. xv + 1098. £104. Philadelphia: WB Saunders. 1990.

WHO Expert Committee On Biological Standardization. 40th report. Pp. 221. SFr. 26. Geneva: World Health Organisation. 1990.

Health Education in the Control of Schistosomiasis. Pp. 61. SFr. 11. Geneva: World Health Organisation. 1990.

Practical Chemotherapy of Malaria. Pp. 141. SFr. 16. Geneva: World Health Organisation. 1990.

WHO Model Prescribing Information: Drugs Used in Parasitic Diseases. Pp. 126. SFr. 21. Geneva: World Health Organisation. 1990.

Rational Use of Drugs in the Management of Acute Diarrhoea in Children. Pp. 71. SFr. 14. Geneva: World Health Organisation. 1990.

Surface Water Drainage for Low-income Communities. Pp. 88. SFr. 16. Geneva: World Health Organisation. 1991.