BOOK REVIEWS

Hyperthermia in cancer therapy. F. KRISTIAN STORM, (Editor) USA, G.K. Hall, xiii+566 pp, 1983 £58.50.

Hyperthermia is becoming of increasing interest as a method of treating cancer. A considerable amount of experimental work has been carried out over the past 10 to 15 years, and more recently an increasing number of centres are treating patients with hyperthermia. It does, however, very much remain an experimental method at this time and only to be used under investigational circumstances. Apart from the specialised literature presented in journals, there have been numerous reviews of the subject but until now, no comprehensive books. However this has been corrected recently by the publication of two books by different authors. This particular volume is edited by one of the clinicians who has worked in the field, and contains contributions by many authors distinguished in their original research.

The book itself attempts to be very comprehensive but suffers from some surprising omissions and also is now slightly dated in some aspects. Not surprisingly because of the nature of the subject, the experimental sections are much stronger than the clinical ones. The clinical presentation is also somewhat biased by the personal preference of the editor, who is a proponent of a clinical technique which has not been accepted by others.

The complexity of the subject is well illustrated by the range of topics discussed. Those concerned with the biological aspects cover the relevant topics very adequately, if perhaps with a rather arbitrary degree of detail imposed by the different authors. Thus a chapter on thermosensitivity in neoplastic cells in vitro is only seven pages in length, whilst a similar one on tissues in vivo is 78 pages long. The excellent chapter on thermostolerance is marred by a failure to discuss the induction of heat shock proteins. It is also very surprising that there is no chapter in which the important subject of the interaction of heat and drugs is specifically discussed.

The sections on physical methods are important because it is the technology at present which is limiting adequate clinical use. There are very useful chapters on theoretical aspects of both heat induction and temperature measurement. As already stated, the application of those methods to clinical results is probably the least well documented part of the book. This is perhaps no fault of the authors, and it correctly expresses the current state of the art. One final note of criticism about methodology might be made, in that there is no mention of a technique employing an annular array of microwave sources which is perhaps the most favoured commercially available equipment in the United States. This technique has attracted much interest in the USA and one would have thought that some discussion of it should have been presented in this book.

This review may sound rather critical of the book. It is always easy to find faults but on balance this is a volume which can be recommended to all who are interested in hyperthermia. For those who are active in the field it will present useful reviews in subjects not directly within their expertise. For those who are not involved but wish to learn about it, it provides a useful source of reading. It is perhaps too long to be read from cover to cover by such persons but would be useful for reference.

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Adult T cell leukaemia and related diseases. M. HANAOKA, K. TAKATSUKI, & M. SHIMOYAMA (Editors) Japan, Japan Scientific Societies Press & Plenum Press, viii+243 pp, 1982, $45.

Haematological diseases now recognised as neoplastic proliferation of T lymphocytes received eponymous titles earlier this century following clinical descriptions by Sternberg and Sezary. In 1976, Dr. Takatsuki's group in Kyoto proposed the title “adult T-cell leukaemia” for a new disease entity with more or less distinctive morphological, clinical and epidemiological features. Subsequently, the blurred borderline between leukaemic and lymphomatous cases prompted a revision of the title, which is now conveniently referred to as Adult T cell-leukaemia lymphoma (ATLL). Such cases occur sporadically throughout the world but their especially high prevalence in Southern Japan, now confirmed by the use of immunological markers, has evoked an enormous interest. The role of a recently defined human retrovirus (ATLV) in leukaemogenesis has been intensively studied and there now seems little doubt that this virus is widely distributed throughout those parts of Southern Japan, and also in the Caribbean, where the disease
is endemic, though neoplasia occurs in only a tiny proportion of infected individuals.

This book is an up-to-date monograph, by a group of Japanese workers, on what is currently known about ATLL and its related malignancies. In addition to ATLL itself there is an interesting chapter, by Dr. Mitsu and his colleagues on cutaneous lymphomata, including the type originally described by Sezary. All these conditions are aptly described and illustrated by colour plates.

In addition to chapters on the clinical presentation, natural history and morphology of ATLL itself, epidemiology and the present state of knowledge of ATLV, there is a useful summary of T cell lymphomas as they may be classified in relation to lymphocyte sub-populations. Although these diseases are encountered only rarely in Western countries, the story of their elucidation in terms of pathology, immunology, and epidemiology is a fascinating one, well covered in the present volume.

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Immunopharmacology and the regulation of leukocyte function. Immunology series—Vol 19. DAVID R. WEBB, (Editor) USA, Marcel Dekker, Inc., 312 pp, 1982, S.Fr. 135.

Immunopharmacology has come of age and, as the series editor Noel Rose suggests in his foreword, is now an acknowledged sub-discipline. It is, however, an area with poorly-defined boundaries and encompasses all aspects of molecular regulation of immune function. Included in this volume are eleven excellent, though largely unrelated, reviews which examine in detail the influence of various endogenous and exogenous factors (interleukin-2, prostaglandins, glucocorticoids, lipopolysaccharides, etc.) on leukocyte function and complement activity.

Naturally the content is selective, and although the book will undoubtedly be of value to the specialist, those requiring a general and systematic introduction to the subject will have to look elsewhere.

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Cancer and the kidney. R.E. RISELBACH & M.B. GARNICK (Editors) Philadelphia, Lea and Febiger, 925 pp, 1982, $105.

In parallel with the advances in the drug treatment of cancer over the past 20 years or so, there has been a considerable advance in our knowledge of the normal and disordered functioning of the kidney. “A comprehensive view of the interaction between cancer and the kidney”, which is the aim of this book, now requires a substantial volume with 25 chapters and 50 contributors. There are five sections, dealing with the basic concepts of nephrology, the effects of tumour products or metabolites on the kidney, the effects of urinary obstruction, the renal complications of anti-neoplastic therapy and finally renal disease and renal transplantation as a cause of neoplasia. There are excellent chapters on such difficult subjects as carcinomatous glomerulopathy and hypercalcaemic renal disease. The nephrologist would not learn a great deal about cancer from this book, but medical oncologists will find this a useful volume for their departmental library. It will help them to recognize the many renal complications associated both with neoplastic disease and with its treatment.

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Tumours of the head and neck in children—clinicopathologic perspectives. R.O. GREER, G.W. MIERAU, & B.E. FAVARA, USA Praeger Scientific, ix + 416 pp, 1983, £37.25.

Cancer in childhood is fortunately rare, and few paediatric oncology centres cater for a large enough population to see more than 100 new cases each year. Tumours of the head and neck, excluding those of the brain and eye, as in this volume, will account for less than 10% of these. The fact that the authors of this monograph have written a text which includes sixteen chapters and runs to over 400 pages attests to the large number of excessively rare conditions which fall into this category.

Clearly, such patients need the benefit of the combined clinical and pathological expertise that can be available in regional centres, and this book will undoubtedly find a place on the shelves of all such units, and maybe also in the medical library and that of the dental school. It is difficult to think who else would benefit from it.

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