Book Reviews

High Dose Rate Brachytherapy – A Textbook

Edited by Subir Nag. New York: Futura Publishing Co. Inc., 1994. 462 pp. \$69.00.

Conventional brachytherapy has always been recognised as an excellent way to deliver a high dose of radiation to the heart of a tumour but has had the disadvantage that it takes a long time and involves risk of radiation exposure. Recent developments in afterloading technology and source design now make it possible to give a high dose of radiation in a very short time without exposure hazard and with the possibility of optimising dose distribution. This multiauthor book reviews recent experience in this rapidly growing field and should be of interest to anyone who has just started or is about to start high dose rate (HDR) brachytherapy.

Those who search for guidance on dose and fractionation regimens are not going to find it, because with the exception of a few sites there is too little experience and insufficient follow-up on which to base advice.

HDR brachytherapy has an accepted role in the management of carcinoma of the bronchus and oesophagus because it allows rapid safe treatment that cannot readily be given in any other way. It is also widely used in gynaecological cancer, but for other sites there are still very few data. Many of the clinical chapters describe the individual techniques used and the results of relatively few patients treated in selected centres in the USA. They do, however, give useful details on how to perform the implant. References are plentiful and up to date with many after 1990, but there is little attempt to place HDR brachytherapy within the context of other treatments, and many valuable European data have not been included. The strongest sections are on the new dosimetry methods that have become available and their integration with imaging and with dose optimisation. There is also a very full discussion of the potentially serious issue of quality assurance.

Most of the criticisms are because the subject is so new that many of the questions arising from it have yet to be answered. It is perhaps too soon for a definitive textbook but the data presented give a good view of the current position, even though much may change over the next few years.

DV Ash

Essential Oncology for Health Professionals

EDL Haagedoorn, J Oldhoff, W Bender, WD Clarke and DTh Sleijfer. Van Gorcum: Assen. 1994. 408 pp. Dfl 85.00. ISBN 902 3229053

This book presents the principles of clinical oncology aimed at the multidisciplinary teams that are now invariably involved in cancer care. Details of chemotherapy are not provided, although side-effects from chemotherapy and radiotherapy provide a significant morbidity for the oncologist and generalist. There is a definitive description of TNM staging, but prognosis is not fully discussed according to specific subgroups of patients which is important in, for example, breast cancer. The level is realistically medical undergraduate rather than postgraduate apart from providing a very general overview. There is a lack of essential biological and pathological detail in most chapters, and often important predisposing factors for cancer development are summarised too generally, for example as 'genetic' or 'environmental events'. Notable by their absence are considerations of cancer genetics and genetic counselling, oncogenes and cytogenetic studies, which accentuates the old-fashioned feel of the book. The role of tumour markers is

oversimplified, particularly in the management of germ cell tumours, where much more detail is essential as salvage treatment may be instituted solely on a raised marker result. It is a concern that a chapter on cancer and nutrition makes no mention of temporary total parenteral nutrition (TPN) and enteral feeding with PEG (percutaneous endoscopic gastrostomy) which have had a profound effect on patient management in the last few years. The patient problems' section is a little confusing: rather than re-examining general approaches to diagnosis and investigation often 'spot diagnoses' are mentioned and referral to specialists advised rather than working through logical management strategies. A glossary of terms and references for further reading would have been useful for the non-specialist. 'Learning points' boxes would allow quicker reference and improve the look of the book as would more imaginative (and preferably colour) illustrations.

In summary, it is difficult to identify a target readership for this book, particularly with competing publications being more modern in approach and presentation.

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Endocrine Tumours

Ernest L Mazzaferri and Nagib A Samaan. Blackwell Science: Oxford. 1995. 86 pp. £150.00. ISBN 0 865422672

This book certainly fills a gap as endocrine oncology has tended to be considered as a Cinderella subject in the oncology field, although past oncologists who have looked after thyroid and endocrine cancer have included some most distinguished individuals. This is generally a most excellent and comprehensive book which covers best the expected areas. However, I did wonder whether it was really necessary to try and be all-embracing and include sections on prostate cancer, testis cancer, germ cell cancers and breast tumours. These chapters are really only superficially covered and might better have been omitted altogether and left to a general oncology textbook or a specialist book. Nevertheless, the overall impression is of an excellent reference book.

I have not attempted to review the entire book since it is some 800-odd pages in length and there are several areas that do not come into my clinical practice, such as pituitary tumours. I have therefore concentrated on the thyroid, adrenal, pancreatic and gastrointestinal endocrine cancers and the carcinoid tumours, which constitute at least two-thirds of the content of the book.

Thyroid cancer management presents a well-balanced overview, putting forward both sides of the arguments in those areas where there are many and deep controversies. Occasionally the authors' individual prejudices are allowed to shine through, but nevertheless the balance is generally very well done. There are plenty of good illustrations, tables and graphs which are clear and easy to understand. The section is well referenced and very comprehensive.

Adrenal neoplasms are also covered in depth; particularly well covered is the area on the work-up and diagnosis of adrenal neoplasms, although the non-surgical management is rather poorer, and the coverage of treatment with radionuclides such as [¹³¹I]MIBG and chemotherapy is almost dismissive. It is perhaps unfortunate that an oncologist did not contribute to this chapter. Furthermore, there is no mention of the use of indium-labelled octreotide in the diagnostic section of neuroendocrine tumours, which may represent an American bias.

Again the section on the gastrointestinal and pancreatic neuroendocrine cancers is generally well done, although it is

curious that over 30 pages are allocated to insulinomas and virtually the same to all the other gastrointestinal and pancreatic endocrine tumours.

As I have already hinted, the only major omission that I can find is the limited reference to the use of octreoscan as a diagnostic agent, which in Europe has become an essential part of the modern diagnostic protocol for the investigation of neuroendocrine cancers. However, this can clearly be updated in future editions, as I am sure this will reach a second edition. Furthermore, in a future edition a little more emphasis could be included on the non-surgical therapies of these cancers.

Who is going to buy this book? Reference libraries should consider this a must, and it will certainly be purchased by oncologists, endocrinologists and surgical oncologists with an interest in thyroid and endocrine cancers. However, the general oncologist is probably not going to have this on his shelf. It is also unfortunate that within the next year there is going to be a rival European book published which is likely to cover the same ground. However, it may well be that the volumes are complementary rather than directly rivalling each other.

In conclusion, this is an excellent book which plugs a gap that needed filling. It is a must for the reference library and a must for those rare oncologists who have a particular interest in endocrine malignancies.

NS Reed

Viruses and Cancer

Edited by AC Minson, JC Neil and MA McCrae, Cambridge: Cambridge University Press, 1994, 309 pp. £55. ISBN 0-521-45472-7.

The story of viruses and cancer is important for two distinct reasons. First, some 15% or more of human cancer incidence is linked with virus infection. Major malignancies in the world, such as cancer of the uterine cervix, primary liver cancer, nasopharyngeal carcinoma (NPC) and several forms of adult T-cell leukaemias and lymphomas, have viruses as an essential component of their aetiology and pathogenesis. Second, oncogenic viruses opened up cancer genetics. Oncogenes were first found in retroviruses long before it was realised that the viruses had purloined cellular genes. Tumour-suppressor proteins were first identified through the study of DNA viruses, as viral proteins such as E6 and E7 of the human papillomaviruses sequester the Rb and p53 proteins, which is the phenotypic equivalent of a genetic knock-out. Thus, studies of oncogenic viruses have had a significance far beyond that proportion of cancer actually caused by them.

This volume on viruses and cancer represents papers given at the 51st Symposium of the British Society for General Microbiology. It provides a useful overview of current research into oncogenic viruses. While some chapters are broad reviews, others are focused more narrowly on the authors' own research.

I particularly enjoyed David Lane's chapter on tumour-suppressor genes and p53 and Karen Vousden's article on cell transformation by human papillomaviruses. More than 50 pages in the volume are devoted to Epstein-Barr virus (EBV) in relation to B-cell transformation and tumours, whereas only two pages discuss NPC. This is in inverse ratio to the prevalence of these tumours, and reveals the inclinations of EBV specialists: lymphomas are easier to study than carcinomas. Human adenoviruses, perhaps the most potent oncogenic viruses of all when experimentally inoculated into rodents, receive no mention at all, not even in George Klein's introductory article. Perhaps they are deemed uninteresting because they have not been associated with human cancer, and not for want of trying. Yet this very negation is fascinating and puzzling.

In the majority of well-studied viral cancers, the viral

genome plays a direct role in cell transformation and the maintenance of the malignant phenotype. Integrated or episomal viral genes are found in the tumour cell clones. However, it is also becoming increasingly evident that viruses can predispose to cancer indirectly. In this volume Ian Weller illustrates HIV-related cancers with respect to immune deficiency, while Jan Butel and colleagues discuss liver cancer in relation to hepatitis B and C viruses, where chronic liver damage may promote the emergence of the premalignant clones of liver cells not infected by the virus.

Viral carcinogenesis may be direct or indirect, but in both cases it can be prevented by immunisation against viral infection in the first place. Here, vaccination is discussed only in relation to human and bovine papillomaviruses and feline leukaemia virus. However, successful intervention studies against hepatitis B virus are already under way in West Africa, and time will tell if this leads to a significant drop in the incidence of liver cancer. There appears to be a synergistic relationship between virus and dietary carcinogens briefly mentioned by Butel *et al.* for liver cancer and by Saveria Campo for bovine papillomavirus type 4. A more thorough discussion of co-factors in viral oncogenesis and the prospects for prevention would not have come amiss. Nonetheless, for those interested in the relation of viruses to cancer, this volume provides a useful introduction to the field.

Professor RA Weiss

Haematological Oncology - Cambridge Medical Reviews Volume 3

Edited by A Burnett, J Armitage, A Newland and A Keating, Cambridge: Cambridge University Press, 1994, £50 hardback. ISBN: 0 521 44208 7.

This is the third volume in the series of reviews highlighting growth areas in haematological oncology aimed at both clinicians and research workers. The editors set themselves a very difficult task in accepting such a wide remit and by and large achieve a lot. However, such review texts become rather piecemeal and lack the continuity of a monograph or text committed to a specific topic. Consequently, in this volume there is something for everyone but no topic is fully covered, e.g. the epidemiology and viral aetiology of lymphomas are included, but these are not put into the context of clinical manifestation, immunophenotyping or pathology. For the clinician reviewing a topic or for the hard-pressed examination candidate multiple texts are thus required, while the researcher is more likely to find value in the bibliographies and hence the original papers.

Those critical comments are applicable to all such texts and must not detract from the well-written individual contributions, all by respected authorities in their field. Cartwright and McNally's Epidemiology of Non-Hodgkin's Lymphomas is an excellent reference source, although so many large tables make it difficult for the reader. I was confused by the comment that 'no clear geographical associations emerged' in childhood NHL and then the discussion of Burkitt's lymphoma, for which there is a very characteristic geographical variation. There were many other intriguing items of interest which, as the authors suggest, do really warrant further research. Onions has produced a very fine and comprehensive overview of the viral aetiology of lymphoid malignancies, as has Myrtle Gordon on the stromal microenvironment. The stroma is a complex area to study but represents a real growing point of haematological research, and this is a timely review of the subject. The back-to-back chapters on myeloma therapy are especially helpful to the practitioner deciding on therapy for an individual patient, and in particular Diana Sampson's final recommendations are clear and very useful. Peripheral blood stem cell transplantation is very much the flavour of the month, for obvious reasons, but with the available growth factors changing so rapidly texts such as this one inevitably become