Testicular Cancer – Investigation and Management
Edited by A. Horwich, London: Chapman & Hall, 1991, 372 pp. £65.00.

There is no single cancer type that has seen so much change in its management over the last 20 years than malignant disease of the testes. Patients that would inevitably die from widespread metastatic tumours are now cured by effective systemic therapy. This has brought with it new advances and new meaning to staging investigations, tumour markers, imaging techniques and our ability to tailor precisely the correct treatment for the individual patient.

This book edited by Alan Horwich puts together 20 years of advance in an easily accessible format. International in character with authors from 10 countries and from both sides of the Atlantic, it is remarkably easy to read, well illustrated by clear diagrams and the use of X-rays. Separate chapters consider advances in tumour imaging, tumour markers, biology and prognosis of seminoma and non-seminomas and an outline of the prognostic classification in metastatic tumours. Surveillance of both seminoma and teratoma is considered in detail with the relevant merits and risks of this technique. The role of radiotherapy – ever diminishing in the management of these tumours— is also evaluated. The surgical techniques of both retroperitoneal lymphadenectomy as carried out in the USA and post-chemotherapy surgery for residual disease are well discussed, although I still cannot understand why the Americans insist on staging lymphadenectomies. Even the modern nerve sparing technique seems a very unpleasant way to gain very little further information. The much more rare malignant extragonadal germ cell tumours are considered and advice on their management given. This volume concludes with a section on the psycho-social assessment and counselling not only of the side-effects of chemotherapy and radiotherapy, but on the long-term problems of sexual dysfunction and infertility.

Packed with information this volume is essential in the library of any cancer treatment unit. For those entering in oncology, it represents a remarkably good summary of the current state of affairs of testicular cancer management. To those already experienced in this area, it is an excellent refresher course. The previous texts on this disease are now outdated and should be rapidly replaced with this volume if standards of patient care are to be maintained.

K. Sikora

Introduction to Radiobiology
M. Tubiana, J. Dutreix & Wambiersie, trans. D.K. Bewley, London: Taylor & Francis, 1990. 371 pp.

This is an update and a translation of the French book ‘Radiobiologie’ originally published in 1986. The aim of the book is to be of value to scientists concerned with cancer and radiation, and for trainees in nuclear medicine and radiation oncology. Amongst clinical oncologists it is likely to appeal most to aspiring candidates for the first part of the Fellowship of the Royal College of Radiologists. The book starts with a summary of the physical effects of radiation, including radiation chemistry, and then goes on to review the effects of radiation on DNA, its cellular consequences, and effects on normal and tumour tissues. Subsequent chapters examine factors that may modify the therapeutic ratio of ionising radiation, such as the importance of time, fractionation and hypoxic cells in radiotherapy, hyperthermia, radiosensitisers, and high-LET radiation. One aspect of the book that I particularly enjoyed was the attempt to put laboratory findings into a clinical context based on available trial data. This is to be expected since both Tubiana and Dutreix are respected clinical radiotherapists, who have worked in the area of radiobiology for many years. A good example is the section on hyperbaric oxygen, and hypoxic cell sensitisers such as Misonidazole which give a balanced clinicians’ interpretation of the strengths and weaknesses of these innovations. However, the review of neutron therapy will be considered rather over-optimistic by most British radiotherapists.

There is a particularly clearly written section on mathematical modelling and cell survival curves, followed by the issue of time and fractionation. A better distinction between, and expansion of the topics of hyperfractionation and accelerated irradiation would however be valuable, particularly with much current interest in CHART (Continuous Hyperfractionated Accelerated Radiotherapy), and other accelerated fractionation regimens in combination with agents to modify tissue oxygenation such as Carbogen (95% O2, 5% CO2). One crucial and poorly understood issue in radiobiology at present is explaining how both normal and malignant cells handle damage induced in DNA by ionising radiation. Current concepts of DNA damage and especially mechanisms of repair at the molecular level would benefit from greater detail within the text, although there is a good description of the inherited diseases thought to have enhanced radiation sensitivity because of abnormal DNA repair, such as Xeroderma pigmentosum.

Particular strengths of this book include excellent and detailed accounts of the effects of radiation on normal tissues and tumours, and an introduction to the potential benefits and pitfalls of combinations of radiotherapy and chemotherapy. The final chapter concerns the effects of irradiation on the human body, including accidental irradiation, and summarises current radiation protection regulations. It contains a balanced view of the risks to man of ionising radiation, and is a highlight of the book with up to date references, such as Gardner’s important epidemiological study showing an increased incidence of leukaemia and non-Hodgkin’s lymphoma in the children of mothers employed at Sellafield.

Two minor points. First, there is an unacceptable number of typographical errors for a major textbook. Second, some of the illustrations are difficult to see and interpret, and it is to be hoped that these will be remedied in further editions of what can be strongly recommended as an appropriately comprehensive general textbook of radiobiology, and a good purchase by trainee oncologists with exams in mind.

S. Falk

A Handbook of Essential Drugs and Regimens in Hematological Oncology
A. Pooiack, Chur, Switzerland: Harwood Academic Publishers, 1991, 165 pp. £14.00.

This book is essentially in two parts; the first describes a variety of cytotoxic agents and cytokines currently in use for patients with haematological malignancy. The second part summarises chemotherapy regimens used for lymphoma, leukaemia and myeloma.

The first part is quite a useful description of the drugs concerned with a very brief summary of their known mechanisms of action and toxicity. The second part quotes references which is commendable; my concern is that it might be seen as a ‘recipe’ book for chemotherapeutic regimens whereas patients should be treated in the context of clinical studies and with careful consideration for their overall situation. That is obviously not a criticism of the book per se the first part of which might indeed have its uses.

A. Rohatiner