Reflecting the increasing emphasis on interpreting images for treatment planning, there is a very useful overview of imaging in oncology as well as a whole section devoted to imaging, divided up into site-specific chapters. This will be most useful to anyone with an interest in oncology. Novel imaging approaches such as multimodality image registration and fusion are also covered in depth, with some excellent supporting colour plates and illustrations.

The site-specific chapters in the section devoted to clinical radiation oncology follow a standard layout for most chapters, with sections on incidence, anatomy, pathology, clinical presentation, routes of spread, diagnostic studies, staging, prognostic factors and standard therapeutic approaches. The editors are true to their word and there is a definite emphasis on first-line treatment. There is, relatively, little information given in the treatment of recurrent disease and salvage treatment. While this was the remit of the book, many patients do relapse despite excellent treatment, and many oncologists are faced with this situation daily. Retreatment is a controversial area and a chapter giving an overview on the challenges an oncologist faces in this position would, I’m sure, have been welcomed.

The editors have stressed the importance of modes of spread allowing decisions on target volumes to be made more rationally, which is particularly important with IMRT planning. Modern immobilisation techniques, precise tumour targeting, radiotherapy simulation, treatment delivery and verification are all looked at in depth for each tumour site. Normal tissue reactions as well as late effects are documented, making this clinical section easy to read and informative. There is an excellent chapter on the treatment of benign disease, which adds to the wealth of knowledge presented in the treatment of malignant disease.

The final section on emerging radiation modalities gives an interesting overview on techniques which are yet to become widespread in use. They offer an insight into particle radiation therapy, hyperthermia, photodynamic therapy, tumour-targeted radioisotope therapy and extracranial stereotactic radioablation.

In today’s multidisciplinary era, it is unusual to find a textbook with such a focus on decision-making and treatment from the radiation oncologist’s point of view. I think this textbook will therefore be enjoyed by any radiation oncologist either in training or as an established practitioner, as well as anyone else who is involved in radiation oncology treatment planning and delivery. I would also expect that medical oncologists would also find this a useful book to have in their library. In my opinion, the editors have achieved what they set out to do.

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Radiation Oncology encompasses all aspects of research that impacts on the treatment of cancer using radiation. It publishes findings in molecular and cellular radiation biology, radiation physics, radiation technology, and clinical oncology. The field of radiation oncology covers the integration of radiation therapy into multimodal treatment approaches. Radiation Oncology provides an open access forum for researchers and clinicians involved in the management and treatment of cancer patients, bringing together the latest research and advances in the field. Advances in treatment technology, as Xxiv, 1674 pages, 71 pages of color plates : 29 cm. Thoroughly revised and updated, the 2nd Edition presents all of the latest advances in the field, including the most recent technologies and techniques. For each tumor site discussed, readers will find unparalleled coverage of multiple treatment plans, histology and biology of the tumor, its anatomic location and routes of spread, and utilization of specialized techniques. This convenient source also reviews all of the basic principles that underlie the selection and application of radiation as a treatment modality, including radiobiology, ra...
Radiation therapy, also referred to as radiotherapy, radiation oncology or therapeutic radiology, is one of the three principal modalities used in treatment of malignant disease (cancer), the other two being surgery and chemotherapy. The intent of the text is to serve as a factual supplement to the various textbooks on medical physics and to provide basic radiation oncology physics knowledge in the form of a syllabus covering all modern aspects of radiation oncology physics. While the text is mainly aimed at radiation oncology professionals, certain parts of it may also be of interest in other branches of medicine that use ionising radiation not for treatment of disease but for diagnosis of disease (diagnostic radiology and nuclear medicine).
It includes the recent advances in radiotherapy techniques; however, it is not designed to replace the large number of textbooks available on radiotherapy physics, which will still be necessary to deepen knowledge in the specific topics reviewed here. It is expected that this handbook will successfully fill a gap in the teaching material for medical radiation physics, providing in a single manageable volume the largest possible coverage available today.

This comprehensive textbook provides an understanding of every aspect of radiation oncology—the natural history of cancer, the physical methods of radiation application, the effects of irradiation on normal tissues, and site-specific applications of radiation therapy either as a single modality or as part of a multimodality treatment program. This edition places greater emphasis on use of radiation oncology in palliative and supportive care as well as therapy. Six new chapters cover stereotactic irradiation outside the CNS; photodynamic therapy; radiation and gene therapy; prostate...
Radiation oncology physics. To understand the role of radiation therapy in curing and palliating disease, a full understanding of the particles and processes involved in the production and delivery of radiation is required. This section provides an introduction to the physical properties of radiation that are fundamental to the clinical applications of radiation. (From Leibel SA, Phillips TL [eds]: Textbook of Radiation Oncology. Philadelphia, WB Saunders, 1998, p 110.) Figure 29-4 Schematic diagram showing the basic components of the treatment head of a modern linear accelerator. A, Components in place for x-ray therapy. B, Components in place for electron therapy. (From Leibel SA, Phillips TL [eds]: Textbook of Radiation Oncology. The practice of radiation oncology constantly involves decision making. Everyday, radiation oncologists are challenged with evaluating diagnostic and therapeutic options for cancer patients, and making decisions together with patients to ensure the best treatment of their disease. Historically, clinical experience and summarized expert knowledge served as important bases of medical practice.