

**Introduction to Clinical Radiation Oncology, 2nd Edition.** Lawrence R. Coia and David J. Moylan, editors. Medical Physics Publishing, Madison, WI, 580 pages, \$32.00 (paperback), 1994.

This short, handbook-like presentation of clinical radiation oncology provides information for physicians and residents in internal medicine and surgery who are responsible for the care of cancer patients. Others who may benefit from this handbook include medical students, first-year residents in radiation oncology and nuclear medicine, and fellows in medical oncology, gynecologic oncology and head and neck surgery. This book gives an overview of radiation therapy sufficient to evaluate what therapeutic response and morbidity can be expected from its application. The text attempts to be a practical and common-sense guide to the patient receiving radiation therapy.

The strength of this publication is that it is comprehensive while being concise. It provides good information about staging and the radiation oncology aspects of common tumors. Chapters which are particularly worthwhile reading for those interested in nuclear medicine are those on pediatric radiation oncology, breast cancer, radiotherapeutic emergencies and radiation safety.

Deficiencies in this book include: chapters that are somewhat uneven, and limited treatment is given to the interaction of radiation with tissues. The radiobiologic discussion is unclear as it alludes to a number of complicated issues without explaining them. For example, clinical relevance of tumor cell kill probability is not discussed with sufficient detail.

The clinical chapters usually include a good discussion of the complications to be expected from radiation therapy. There is inadequate discussion of response patterns, especially failure, and whether salvage by chemotherapy or surgery is possible. Many diagnostic aspects are treated superficially. For example, there is no mention of PET-FDG for assessment of recurrent brain tumor versus radiation necrosis in patients with glioblastoma multiforme or astrocytoma with anaplastic features. Also, there is no mention of  $^{67}\text{Ga}$  for evaluation of indeterminate masses for Hodgkin's disease or non-Hodgkin's disease. In general, there seems to be a certain naivete about the application of diagnostic procedures. For example, there is an almost nostalgic look at the contrast lymphangiogram in the chapters on lymphoma, without addressing the modern approaches to diagnosis. Also, the more recent information about delayed complications post-radiation of lymphoma, in which as many as one-third of the patients will develop premature ischemic cardiovascular disease due to mediastinal radiation, is not given sufficient emphasis.

Another deficiency is that internal emitters are not well described. For example,  $^{131}\text{I}$  for thyroid cancer is mentioned, but there is no description of optimal doses, response patterns, expected recurrence rates or any sophisticated treatment of patient selection. Strontium-89 is mentioned, but there is no practical guidance given as to when to use this agent in relation to external beam radiation for the control of cancer pain.

The virtue of the book is that it is relatively concise and gives an overview with excellent information about the various staging criteria for most tumor types. There is limited treatment, how-

ever, of the more basic aspects of radiobiology and radiation effects on normal tissue.

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**Nuclear Medicine Procedure Manual 1995-96.** W.C. Klingensmith III, D. Eshima, J. Goddard, editors. Wick Publishing, Englewood, CO, (\$225.00) Notebook or disk (\$195.00) or combination (\$345.00), 1995.

Every nuclear medicine facility has a procedure manual. Although we make a large effort to keep our manual current and to have all the appropriate information in it, our manual is not of the quality of the *Nuclear Medicine Procedure Manual*. Because of the information contained in this manual, the ease of using the manual and the ability to continually update it, every facility performing diagnostic and therapeutic nuclear medicine procedures would benefit from acquiring this manual.

This manual is outstanding. It provides information important to the daily practice of nuclear medicine in a format not available in any other single document. Furthermore, the manual is current and has descriptions of all radiopharmaceuticals recently approved by the Food and Drug Administration, including  $^{99\text{m}}\text{Tc}$ -ECD. The manual is complete and provides information difficult to find in the literature. For example, data on the excretion of radiopharmaceuticals in breast milk and recommendations for the length of time that breast feeding should be interrupted for various radiopharmaceuticals are included.

The manual is easy to use. Tabs clearly identify the pertinent categories and sections. The references that are provided with each section are beneficial to manual users. The manual accurately describes procedures and dosages, and I identified only a few minor errors during my review.

This manual addresses the four major sections of general policies, diagnostic procedures, therapeutic procedures and radiopharmacy, and includes appendices. The general policies section includes subsections on performing a study, department guidelines, quality control/assurance of instrumentation, laboratory and radiochemistry procedures, and regulatory agencies. The diagnostic procedures section includes all commonly performed nuclear medicine procedures of the organ systems. The therapeutic procedures section is divided into subsections on the organ systems. The radiopharmacy section provides information on each of the radiopharmaceuticals, including commercial sources. The appendices provide references for procedures that are not included in the other sections of the manual.

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