Radiation and Thyroid. S. Nagataki, editor, 93 pp. For ordering information, contact the Japanese Society of Nuclear Medicine.

This book is an aggregation of papers presented at the symposium of the Annual Meeting of the Japanese Society of Nuclear Medicine held in Nagasaki in 1987. The symposium focused on "radiation and its effects on the thyroid." First, the incidence of thyroid diseases in atomic bomb survivors in Nagasaki and in Marshall Islands residents was reported. Then, the data on the exposure of the European population to radioactive iodine by the Chernobyl reactor accident and changes in levels of \(^{131}I\) in animal thyroid glands during the period between 1954 to 1987 were described. Finally, medical use of \(^{131}I\) in patients with Graves' disease in U.S. and Japan were presented.

I emphasize Nagasaki should be the final city directly exposed to the atomic bomb. At present, nuclear power, such as an atomic power plant, is essential for us. Therefore, we must safely operate nuclear energy and learn more about nuclear radiation hazard and proper protection of not only humans but the earth. This book is edited from a purely scientific standpoint. The prevalence of thyroid abnormalities is extremely high in both direct exposure survivors and fallout exposure subjects. Hypothyroidism and nodular goiter are the major late effects of radiation. Atmospheric nuclear weapon tests resulted in \(^{131}I\) contamination of the particular hemisphere. Since 1963, \(^{131}I\) concentration had been reduced by the introduction of underground testing, but exceeded the previous levels after the Chernobyl accident. Fortunately, the potential effects of Chernobyl fallout on the thyroid seem almost negligible from a public health point of view. No critical complications attributed to radiiodine therapy in patients with Graves' disease have been recorded. I stress my agreement with the authors that hypothyroidism is inevitable after treatment, and avoidance of hypothyroidism is not major problem. Cure of hyperthyroidism and follow-up of patients are important.

It is our hope that the Chernobyl accident will be the worst to occur, but our present knowledge concerning preparedness for greater accidents is incomplete. Since total-body dose will be mainly affected by long-lived isotopes like cesium, we should realize that greater cesium contamination is derived from reactor accident than weapons. The longer the reactor operates, the greater it accumulates cesium.

This book is well written, extremely interesting, up-to-date, and recommended for endocrinologists, nuclear medicine specialists and radiobiologists.

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Interventional Computed Tomography.

This book is devoted entirely to describing the wide range of interventions possible using computed tomographic guidance. The authors obviously have a great deal of experience with these techniques, and in fact have been instrumental in the development of several of the procedures described. Their experience, thoroughness, and especially their care and concern for their patients, is evident throughout the book.

The book is intended primarily for the radiologist or resident/fellow who either performs or would like to learn to perform a wide variety of interventional techniques. It is divided into three main sections: biopsy techniques, therapeutic procedures, and techniques for the management of fluid collections.

The initial section on biopsy techniques is more a brief atlas of some of the possibilities using CT guidance than a complete description of the procedures. While their techniques are well thought out and apparently in keeping with that of other authors, too much detail has been omitted. More information on such topics as indications/contraindications, potential complications, and limitations of the techniques would be helpful to the reader. Furthermore, though the images included are generally of high quality, the captions are not always clear and not enough labeling has been used. Finally, more examples of "bread and butter" biopsies would be useful.

The second general section of the book deals with CT-guided therapeutic procedures for the management of spinal column diseases, cancer and cancer-related pain, and vascular disorders. The authors present several innovative techniques which may be unfamiliar to many readers. Because these techniques are performed (at least in this country) far less frequently than biopsy and drainage procedures, the material is new and makes for interesting reading. Furthermore, the chapters on anatomy and physiology are excellent: well-detailed, clear, and well-illustrated. However, several of the other chapters read more like journal articles than a textbook, and most lack the detail necessary for one to learn to perform these procedures.

The third section of the book discusses the percutaneous management of fluid collections and urinary tract diseases. The authors present a well thought-out approach to these procedures and include some interesting ideas such as the use of a combined CT/fluoro unit. Once again, unfortunately, the necessary detail is not present for one to learn to perform these procedures. Additionally, topics such as the selection and use of antibiotics, flushes, duration of catheter drainage, and management of potential complications, are barely mentioned.

Finally, the fourth section, "Future Outlook," presents some interesting insights into the future of CT- (and MR-) guided procedures.

Overall, though the book does cover the wide variety of techniques possible when using CT guidance and is written by authors obviously experienced with the techniques, it falls short by not providing adequate detail in many instances. It would also have been beneficial, given that the book is devoted almost entirely to CT-guided procedures, if more discussion about the specific advantages and disadvantages of that modality relative to others had been included. Despite these shortcomings. if used primarily as an atlas, Interventional Computed Tomography may be useful for the libraries of radiology departments in which such procedures are performed. It is probably not adequate, however, for those trying to learn to perform these procedures.

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