**BOOK REVIEWS**


As stated by the editor, this volume was intended to meet the needs of medical students, gynecologic oncologists, and a broad spectrum in between. This rather ambitious aim is achieved in 421 pages, carefully written by 20 experts.

Five introductory chapters are followed by 19 sections dedicated to specific clinical areas. The team approach and the need for individualized treatment are frequently emphasized and attention is paid not only to the treatment of particular diseases but also to epidemiology, etiology, rehabilitation, and cause of death.

The first chapter, a brief discussion of the changing field of gynecologic oncology and health care, is a good example of the tone of this book. Gynecologic pathology and cytopathology are then presented clearly complete with the techniques for obtaining of specimens. The basics of radiotherapy physics and the principles of cancer chemotherapy are explained successfully. Each entity is then discussed in detail and treatment methods outlined by a gynecologic oncologist and a radiation oncologist. The only criticism here is the repeated discussion of epidemiology and staging when different authors contribute to the same pathologic entity; however, this deficit of the format does not affect the general quality of the text. It would have been helpful if the chapter on immunology had been included with the introductory chapters. The section on restoration of function and prevention of disability adds to the completeness of the text, and the last chapter on the dying gynecologic cancer patient is a lucid presentation with a wise conclusion. The bibliography is abundant and updated.

This worthy reference text is a refreshing update for those engaged in the care of the gynecologic cancer patient and is a valuable introduction to the field for the avid student.

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This attractively bound atlas has an easy-to-read format with good correspondence between the text and illustrations. The material is clinically oriented. Instead of a detailed discussion of the physical principles of ultrasound, the author gives a good explanation of the diagnostic criteria employed in sonographic studies and offers practical suggestions on the approach to pediatric patients referred for these examinations. The various disease entities are organized on an anatomic regional basis and by organ systems. In each condition the developmental basis or pathogenesis is briefly but clearly presented, and examples of the radiographic, scintigraphic, and sonographic findings are shown and correlated. This integrated approach makes the atlas not only useful for the sonographer but also of considerable interest to the nuclear medicine physician and to the diagnostic radiologist. The information in this volume will be especially valuable for the ultrasound specialist who only occasionally sees children. Of perhaps equal importance is the applicability of many of the discussions to problems encountered in the adult as well as the pediatric age group. Finally, it is very refreshing to encounter a publication of this magnitude in which all the scans, both scintigraphic and sonographic, have been performed with current, state-of-the-art instrumentation.

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**BIOLOGICAL EFFECTS OF 224Ra. Benefit and Risks of Therapeutic Application.** W. A. Müller and H. G. Ebert, eds. The Hague/Boston, Martinus Nijhoff Medical Division, 1978, 238 pp

This book represents the Proceedings of the Second Symposium on Ra-224, held September 1976 at Neuherberg/Munich. The main topic discussed was the benefit and risk of the therapeutic application of Ra-224 in the treatment of ankylosing spondylitis and arthritic disease. The long-term effects of high-LET ionizing radiation on man, the quantitative data involved in risk assessment at low doses, and the problems of radiation protection in medicine—achieving therapeutic effect while reducing radiation exposure—were the aspects presented.

Of the 23 papers all are in English, except one written in French. The first series deal with the pathology and clinical findings of ankylosing spondylitis, and the indications for and results of Ra-224 and x-ray therapy. The next group of papers discusses the efficacy of Ra-224 and other radioisotopes in the treatment of rheumatoid arthritis and the effect of Ra-224 in Morbus Paget. Other papers review clinical experience pertaining to the late effects and risks of Ra-224 use and summarize experiments in mice with the short-lived Ra-224 and the long-lived Ra-226. The last section presents a model for the induction of bone cancer by Ra-224. The bone sarcoma risks to man from Ra-224, Ra-226, and Pu-239 are compared, and the problems in radiation protection, with respect to α-emitters in bone, are discussed. Experiments in mice have shown that although the radiation dose after repeated injections of Ra-224 was comparable to that of a single administration of Ra-226, the radiotoxicity of Ra-224 was several times greater than that of the sister isotope. This is attributed to the different temporal and spatial distribution of skeletal α-doses. In man, the risk coefficient for Ra-224 ranges from about 40 to 200 bone sarcomas per 100,000 persons, depending on whether the Ra-224 is given in a single or in repeated injections. The risk per rad should be roughly similar for protracted irradiation from Pu-239 and Ra-224, both of which decay to a large extent on bone surfaces. The risk

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coefficient for long-lived Ra-226 and Ra-228, which decay mostly within the bone, is much smaller (6 and 53 bone sarcomas per 100,000 persons). If therapeutic amounts of Ra-224 cause bone sarcoma in no more than a few of a thousand treated patients, then—it is pointed out—this rate might be considered an acceptable risk in the treatment of this serious disease.

The Proceedings will be useful for clinicians and experimental radiobiologists interested in the treatment of ankylosing spondylitis, the late effects of incorporated radionuclides, and the benefit/risk evaluation.

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**PRAIRIE PROVINCE CHAPTER**

**ANNUAL MEETING**

April 27-28, 1979 Regina, Saskatchewan, Canada

**CALL FOR ABSTRACTS**

Abstracts are now being accepted for the Annual Meeting of the Prairie Province Chapter of the Society of Nuclear Medicine, to be held in Regina, Saskatchewan, Canada, April 27-28, 1979. Abstracts should be typed in a single-space format, with line length not exceeding 4½ inches, and limited to less than 250 words, including title. Send the Abstract to:

Dr. Z. Catz
Nuclear Medicine Department
Plains Health Center
4500 Wascona Parkway
Regina, Saskatchewan, Canada

**Abstract deadline: February 28, 1979**

For further information write to the above address or telephone Dr. Ian Tyson at (303) 527-9641.