This book is an organized overview of nuclear medicine pertinent to clinical practice and has been one of the most popular textbooks for trainees in nuclear medicine and radiology since its first edition in 1995. Each book in "The Requisites" series is written by nationally recognized authorities in their respective subspecialty areas. Each author is challenged to present material in the context of today's practice of radiology in a way that makes it possible to access the most important topic efficiently. This fourth edition closely follows the philosophy and format of the original to provide a concise and updated introduction and review of the nuclear medicine field. Many advances have been made in radiopharmaceuticals and instrumentation since the publication of the third edition in 2006. Standard use of PET/CT has become widely accepted, and SPECT/CT is increasing in clinical use. PET/MR imaging is still in its infancy, but enough data are at hand to predict that this integrated imaging will become important. The integrated methods of SPECT/CT, PET/CT, and PET/MR imaging require higher levels of knowledge of anatomic cross-sectional imaging than ever before, as well as greater knowledge of imaging technology and molecular biology.

This edition contains many new superb images and revised, updated text. The book consists of 2 parts with 17 chapters. Part I, with 5 basic science chapters, deals with important principles of radiopharmaceuticals, has a new chapter on molecular imaging and a rewritten chapter on physics, and has chapters on instrumentation, radiation detection, and hybrid imaging with SPECT and PET. Part II, with 12 clinical chapters, discusses the endocrine, skeletal, hepatobiliary, genitourinary, pulmonary, gastrointestinal, central nervous, and cardiac systems, as well as infection and inflammation, and has extensively revised the oncology chapters and the popular "Pears, Pitfalls, and Frequently Asked Questions." The clinical chapters continue to follow a logical progression from basic principles of tracer distribution and localization to practical clinical application. Therefore, there is an emphasis on the pharmacokinetics and understanding of disease pathophysiology, leading naturally to the choice of optimal imaging methods and study interpretation.

This book delivers the conceptual, factual, and interpretive information for effective clinical practice of nuclear medicine imaging, as well as for board or certification review. It is a clear, concise text enhanced by optimal illustrations, helpful boxes, tables, suggested reading, and index. I highly recommend this book to medical students, trainees, and practitioners in nuclear medicine and radiology.

Footnotes

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Get the essential tools you need to make an accurate diagnosis with Nuclear Medicine: The Requisites! The newest edition of his bestselling volume by Drs. Harvey Ziessman, Janis O’Malley, and James Thrall delivers the conceptual, factual, and interpretive information you need for effective clinical practice in nuclear medicine imaging, as well as for certification and recertification review. Prepare for the written board exam and for clinical practice with critical information on nuclear medicine physics, detection and instrumentation, SPECT and PET imaging, and clinical nuclear medicine.