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BOOK REVIEW

Abdelhamid H. Elgazzar (Editor). The pathophysiologic basis of nuclear medicine, *Fourth Edition*

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I want to start this review with the editor's dedication ***"To the poor around the globe who needs more justified care and attention"***. I completely share this intention with Abdelhamid H. Elgazzar, believing, like him, that health is a universal right that must be recognized for everyone and that the main task of those who dedicate their lives to medicine is to do their job at their best. In more than 40 years of teaching activity, I have always taught that to be a good nuclear physician, i.e. an expert in functional and molecular imaging, one must have excellent knowledge of the physiopathology which is the basis of every diagnostic examination, of every radionuclide therapy.

For this reason, I am extremely pleased to recommend to all readers the fourth edition of this book, which I believe is essential for the training and/or updating of every resident or professional in nuclear medicine. My personal interest for the books edited by A. H. Elgazzar starts from the first edition of this publication, published in 2001, over 20 years ago, with updated contents in subsequent editions, without altering the extremely didactic structure of the book, nor the thinking behind its writing: we must learn well what underlies what we see, because we are not just readers of images, but interpreters of pathophysiological pathways that change in each patient and in the same patient at different times. So, always starting from the clinical knowledge of the individual undergoing the examination, we must be able to think also about what we have never seen, which is not in the database of our professional experience.

In this 4th edition, the internationally recognized clinical expert and researcher Abdelhamid H. Elgazzar, professor and chairman of the Nuclear Medicine Department at Kuwait University, updated and simplified the content of the previous editions increasing information on the most recent applications, mainly connected to the development of hybrid machines, with main reference to PET/CT, and therefore to what we call today, molecular imaging.

In a well-written volume of 603 pages, enriched by 146 b/w illustrations and 214 illustrations in colour of high didactic value, and by an extensive and updated bibliography, Elgazzar and his co-authors have produced a homogeneous, extensive, deep and easy to learn contribution divided into the following chapters: (1) Pathophysiology: General Principles; (2) Ionizing Radiation: Biologic Effects and Essential Cell Biology; (3) Basis of Radiopharmaceutical Localization; (4) Inflammation; (5) Musculoskeletal System; (6) Endocrine System; (7) Genitourinary System; (8) Respiratory System; (9) Circulatory System (Cardiovascular and Lymphatic Systems); (10) Digestive System; (11) Central Nervous System; (12) Nuclear Oncology; (13) Basis of Therapeutic Nuclear Medicine.

I strongly support the acquirement of this publication, that has to be in the library of all the Schools of Specialization of Nuclear Medicine worldwide, to the residents in diagnostic imaging and to the professionals in our discipline. Furthermore, the book can be of interest for radiologists and for all practitioners, clinicians and surgeons, who can better understand the logic behind nuclear medical examinations and therapies, in order to prescribe them with the utmost rationality and competence. All of them can understand how nuclear medicine, that is born molecular and theragnostic with Iodine-131 many decades ago, has a great role in the present, based on deep and very vital roots that are the basis of an increasingly fascinating future's tree.

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