

# Valentina Ambrosini and Stefano Fanti (eds): Clinicians' Guides to Radionuclide Hybrid Imaging: PET/CT in Neuroendocrine Tumors

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*PET/CT in Neuroendocrine Tumors* is part of a collection of 15 light booklets published by Springer under the auspices of the British Nuclear Medicine Society. The title of the series is “Clinicians’ Guides to Radionuclide Hybrid Imaging” and the editors are J.B. Bomanji, G. Gnanasegaran, S. Fanti and H.A. Macapinlac. This book is edited by two international experts in the field: Valentina Ambrosini and Stefano Fanti, from the University of Bologna.

The book is slender and compact, consisting of 76 pages divided into eight chapters that describe all the major aspects of neuroendocrine tumours (NETs), mainly in relation to the role of nuclear medicine. Useful key points are given at the end of each chapter. The first three chapters offer a very clear analysis of epidemiology, histological classification and immunophenotypic profiling, clinical presentation and staging of NETs. The authors consider the actual management of NETs, based on tumour grade (low, intermediate or advanced). The different therapeutic options including surgery, chemotherapy, peptide radioreceptor and locoregional therapy are also discussed. The following chapters focus on imaging of NETs, beginning with a discussion of radiological techniques (CT, MRI, and ultrasonography including contrast-enhanced and endoscopic ultrasonography) used for detection, staging and follow-up of these tumours. One chapter discusses the role of SPECT in NETs. Clinical indications, advantages and limita-

tions are discussed either considering the use of MIBG and somatostatin analogues, radiolabelled with gamma emitters. The implementation of SPECT/CT is also discussed. An interesting summary, mainly useful for readers without technical experience, describes the basic principles of PET/CT Imaging that includes a description and functioning of a PET scanner, the imaging protocol used with <sup>18</sup>F-FDG PET/CT and the major artefacts that can occur. The most interesting chapter deals with the use and with differential indications of several positron emitter radiotracers clinically available in patients with NETs, including <sup>68</sup>Ga-DOTA peptides, <sup>18</sup>F-DOPA and <sup>18</sup>F-FDG. For each of these normal variants, artefacts and pitfalls in image interpretation are also discussed. The book concludes with a “Neuroendocrine Tumors Pictorial Atlas” which presents 20 particularly interesting cases of NETs, in which the interpretation of PET/CT hybrid images is helped by the addition of teaching point relating to the images.

As clearly indicated in the series title, the book is mainly directed to all clinicians interested in the role of nuclear medicine in patients with NETs. Residents and practitioners in nuclear medicine and radiology may also find this book interesting and useful for improving their understanding of the potential of nuclear medicine in patients affected with these tumours and then for explaining this to their referrers.

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