

# Atlas of Epilepsies



C. P. Panayiotopoulos  
Editor

# Atlas of Epilepsies

With 1147 Figures and 360 Tables

Editor

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# Preface

Over the last two decades, there have been spectacular advances in all fields of epilepsies from basic research to clinical diagnosis, investigative procedures, epidemiology, etiology, genetics, comorbidities, psychosocial implications, and therapeutic options. The diagnosis of epilepsies has become more specific with the identification of epileptic syndromes and the treatment has expanded beyond the control of seizures to include improvement of quality of life.

Epilepsies have now become an important part of pediatric and adult medicine, and are properly assessed and managed with the same rules as other medical diseases. Precise syndromic diagnosis, prognosis, and optional management for every patient are the ultimate and often achievable goals.

There is a wealth of research, experience, and interest in epilepsies all over the world. There has been a tremendous increase of journals, books, other publications, and websites dedicated to epilepsies. There are numerous and well-attended local and international meetings all over the globe covering specific or more general aspects of epilepsies. A new generation of brilliant clinicians and scientists, the future stars and guarantors of epileptology, is evident through their eminent publications and contributions.

The *Atlas of Epilepsies* is to provide an expert and concise resource of knowledge for scientists and health care professionals coping with the demands of modern epileptology. It is particularly shaped for the pressured clinicians who need a clear, concise, and balanced distillation of the best information on which to base daily clinical decisions and optimal care of patient and family. It is purposely structured and designed so that physicians and other health professionals can access the most salient features of any aspect of epileptology, diseases, clinical presentations, and treatments within minutes.

With 288 chapters, the *Atlas of Epilepsies* covers terminology and classifications, history, epidemiology, etiology and pathology, pathophysiology of epileptic seizures and their impact on the developing and mature brain, animal and other experimental models of epileptogenicity, all types of generalized and focal epileptic seizures at all ages, status epilepticus, imitators of epileptic seizures, investigative procedures, all recognized epileptic syndromes and some in development, progressive myoclonic epilepsies, aspects in specified groups of patients, comorbidities, psychosocial impacts, and pharmacological, surgical and other therapeutic approaches with an extensive pharmacopoeia.

Each chapter is brief, succinct, and contains digested knowledge on the topic supported by key references, figures, illustrations, tables, and histograms, which make the *Atlas of Epilepsies* different from other eminent reference books. A full-color format stresses on the illustrative nature of the *Atlas of Epilepsies*, which contains 1147 illustrations with a wealth of ictal and interictal EEGs, structural and functional brain imaging, specific pathological pictures and other images of diagnostic, clinical and pathophysiological significance. Naturally some topics are more illustrative than others that are text-heavy.

In epilepsies, like in other medical diseases, there are well-clarified areas of agreement and “knowns” but there are also significant and sometimes diverse opinions and debates on important and still developing areas of “semi-knowns” or “unknowns”. These are well reflected in various chapters of the Atlas which do not seek consensus. Overlapping has been welcome and purposely promoted in order that readers may benefit from the opinions of different experts.

The *Atlas of Epilepsies* is the product and exclusive contribution from 14 preeminent section editors and their 315 expert authors from 32 countries from all specialties of epileptology. They are among the foremost authorities, influential leaders of the ILAE, and protagonists in the frontiers of modern clinical and research epileptology. The new generation of epileptologists is shining with prominent contributions. I wish to thoroughly and warmly acknowledge the generosity of all the contributors who enriched this Atlas with their expertise and wisdom at the expense of their valuable and demanding time, other commitments, and priorities. My association and communication with them has been an honor, privilege, a source of continuing learning for me, and my main gain from this production.

My particular thanks and gratitude go to the section editors who did the main and essential work for the “*Atlas of Epilepsies*”: Selim R. Benbadis, Roy G. Beran, Anne T. Berg, Jerome Engel, Jr., Aristeia S. Galanopoulou,

Peter W. Kaplan, Michail Koutroumanidis, Solomon L. Moshe, Douglas R. Nordli, Jr., Jose M. Serratosa, Sanjay M. Sisodiya, William O. Tatum, IV, Thalia Valeta, and Andrew N. Wilner.

Springer, the publisher, has made available significant resources and its high expertise in publishing to make the *Atlas of Epilepsies* a truly significant and beautiful book for health care professionals. I am grateful to William F. Curtis, PhD, Executive Vice President, Springer Clinical Medicine and President, Springer Science + Business Media, and Melissa Morton, Senior Editor, Springer Science + Business Media, Clinical Medicine, for their enthusiastic approval and continuing support for the *Atlas of Epilepsies*. Anil Joseph Chandy, Springer Executive Editor, Sandra Fabiani, Springer Executive Editor Major Reference Works and Sunisha Mukundan, Project Manager, Publishing, SPi have been fundamental in making this Atlas a better book through their high professional standards and unlimited time involvement over the last 20 months of its production.

I hope that all the hard work and dedication of so many eminent colleagues and professionals involved in the production of the *Atlas of Epilepsies* will contribute to a better understanding, diagnosis, and management of epilepsies for the benefit of our patients and their families.

C. P. Panayiotopoulos MD, PhD, FRCP  
Oxford  
August 2010

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