

The Role of EEG in the Diagnosis and Classification of Epilepsy Syndromes: A Tool for Clinical Practice by the ILAE Neurophysiology Task Force.

Michalis Koutroumanidis, et al, France, Editions John Libbey Eurotext, 2018, ISBN: 978-2-7420-1562-7. Price: 56 Euro

Establishing a syndromic diagnosis forms the cornerstone of epilepsy management and enables the physician to choose appropriate treatment and also provides vital information regarding the prognosis. EEG is one of the most important tools for ascertaining the syndromic diagnosis apart from clinical history, neuroimaging, and genetic studies. There have been remarkable recent advances in the understanding of epilepsy reflected by the various classification systems proposed over the past three decades.

The book commissioned by the ILAE Neurophysiology Task Force and edited by Michalis Koutroumanidis remarkably rises to this huge challenge. The editor and 12 other authors, mainly from Europe and the United States, are well-known experts in the field of neurophysiology who all have contributed to the advancement of art and science of EEG. This book through its 9 chapters and 256 pages comprehensively covers the clinical and EEG features of various epilepsy syndromes while avoiding too many technical details, making it easy to read for the clinician. The first chapter gives a good overview of the clinical EEG practice and establishes the background of this book. The rest of chapters are dedicated to clinical and EEG features in various epilepsy syndromes. Genetic (idiopathic) generalized epilepsies are covered in chapters 2 and 3, which apart from focusing on well-defined generalized epilepsy syndromes also discuss the clinical and EEG features of less commonly observed possible genetic syndromes, such as eyelid myoclonia with absences, myoclonic–atonic epilepsy, epilepsy with phantom absences, and various other syndromes. Structural and genetic focal epilepsies are well covered in chapter 5, whereas chapters 4 and 6 discuss reflex and progressive myoclonic epilepsies, respectively. Last three chapters are dedicated to various epilepsy syndromes in the pediatric age group ranging from the neonatal period to adolescent age group covering benign age-related focal epilepsy syndromes and symptomatic generalized epilepsy syndromes.

All the chapters in the book are arranged in a uniform pattern. The chapters follow a unique pattern of describing clinical and EEG features of each epilepsy syndrome. Although the main focus of the book is on the EEG features, inclusion of clinical details of each epilepsy syndrome is a delight that emphasizes the need for the electroclinical correlation in

diagnosing various epilepsy syndromes. The EEG description includes both interictal and ictal EEG features. The typical electroclinical features are followed by the description of atypical EEG and video EEG features of each syndrome. This is followed by a detailed description of recording protocols for each epilepsy syndrome both at basic and advanced levels depending on the availability of resources. This feature makes this book very useful for EEG technologists. Finally, authors describe the levels of certainty of EEG diagnosis for each syndrome, classifying it as confirmatory, probable, and possible depending on the presence or absence of various clinical and EEG features. This unique feature along with the description of recording protocols has not been tried in the past and places this book a notch higher than other books on the same subject. In addition, important points are summarized in appropriate tables and graphics.

The main feature of any book dedicated to EEG is the quality and variety of EEG figures. Authors have taken care to include excellent examples of both typical and atypical EEG features of each syndrome. Most figures are snapshots of digital EEG, although some photographs of paper EEG are also included. Due to the inclusion of figures from various digital systems, there is bit of heterogeneity among the figures and montages. Figures are produced in portrait format rather than the landscape format, which makes it easy to read without the need for rotating the book. However, due to small size of the book, some of the figures and montages are not very clear and difficult to read, which does cause a little hindrance. This could be probably improved by producing the book in A4 size, which may make the figures clearer. I also feel that language of the book could have been simplified and more direct for the benefit of nonnative speakers of English language. The price of 56 Euro; although appropriate for the developed countries, it may be a bit steep for developing countries. As this book is not meant to be an EEG atlas, the technical aspects of EEG and various nonepileptiform patterns are not covered for which readers can refer to other excellent resources.

In conclusion, authors have succeeded in their endeavor to produce an up-to-date tool in this excellent monograph on clinical and EEG features of various epilepsy syndromes. This book is a must have for any person interested in EEG and epilepsy, including adult and pediatric epileptologists, epilepsy and neurology trainees and fellows, and EEG technologists.

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