

## Book Review

---

**Clinical Electroencephalography**, by Usha K. Misra and Jayantee Kalita, Reed Elsevier India Private Ltd, First Edition 2005. ISBN 81-8147-546-1.

This book, as the authors announce in the preface, is a wholehearted attempt to deal with all aspects of electroencephalography (EEG), primarily aiming to cover the needs of physicians and students in developing countries. The themes in this book are indeed relevant to clinical neurophysiology, neurology, psychiatry, pediatrics, and even intensive care physicians and obstetricians, tailored mainly to the special wants and necessities in countries where readily available access to more technologically sophisticated diagnostic techniques is either difficult or missing. The authors devote lengthy chapters to infectious diseases (where the reader may find synopses of entities and pathological conditions that represent mere rarities in Western countries), psychiatry and obstetrics, clinical areas where care may be suboptimal. Another example of this approach is the very good chapter on the role of EEG in the presurgical evaluation of epilepsy patients, contributed by Drs. Sylaja and Radhakrisnan, which focuses wisely on interictal and ictal scalp EEG recordings and telemetry, mainly in temporal lobe epilepsy rather than intracranial electrophysiology and magnetoencephalography. The idea is that state-of-the-art interictal and ictal scalp EEG recordings can be available in developing countries, and form (together with brain magnetic resonance imaging) the cornerstone of a successful epilepsy surgery program.

The strength of this book is exactly this wide range of topics and clinical needs that EEG can serve. Chapter one introduces the historical perspective of EEG, and contains interesting information that cannot be found in other general EEG textbooks, such as the humane aspects of the lives of Adolf Beck and Hans Berger in Nazi Germany. There are also some Internet links, but are not very helpful. Chapter 2 explores the technical aspects and is well composed and informative. The statement in the paragraph on subdermal electrodes (page 13) that sterilization will prevent transmission of Creutzfeldt-Jakob disease (amongst other in-

fections) is certainly inaccurate, and has to be clarified in the next edition. However, this chapter is amongst the strongest in the book, and I particularly enjoyed the rightly lengthy discussion on derivations and montages. This area is still obscure for many who attempt to read and interpret EEG worldwide, and the authors have approached it comprehensively and with authority. Chapter 3 is generally well-written, especially the adult section, but the neonatal section may need some attention. Excessive information here seems to have affected clarity to some extent, which seems inevitable in the limited space of a general EEG handbook. Chapter 4 is devoted to artifacts and benign EEG variants and is excellent, but would benefit from more recently published references. The same applies to some parts of Chapter 5 on epileptiform and non-epileptiform paroxysmal EEG abnormalities, as for example in the case of subacute sclerosing panencephalitis. This chapter is also well-written and illustrated with good examples. Chapter 6 on electroencephalography in epilepsy is also well handled and balanced. It starts with the principle mechanisms of seizures, and is well-updated in terms of genetics and classification. Chapter 7 on pediatric EEG is also informative and most of the syndromes/conditions are indeed well-written with up-to-date references, such as the benign familial neonatal convulsions, the benign idiopathic focal epilepsies, and the discussion on non-epileptic attacks in children. The tables are clear and informative, but the authors might wish to take into account that midline and multifocal spikes also occur in idiopathic localization-related epilepsies (Table 7.7, page 186). Finally, the term “catastrophic childhood epilepsies” has been used by the University of California in Los Angeles (UCLA) group to characterize multifocal and even diffuse interictal EEG abnormalities in children with focal brain lesions and intractable seizures, as opposed to those with “adult type EEG changes”, and this could make a worthy addition for the next edition, probably within (or along) the “medial temporal lobe epilepsy” section (pages 194–195). Chapter 8 is devoted to status epilepticus and is comprehensive, but again references need updating. The remaining chapters on brain tumors, cen-

tral nervous system infections and infestations, dementia, metabolic disorders, and coma are very informative with rich iconography from own cases, and interesting to read. The chapters on psychiatric and obstetric disorders also contain more information than one would expect, and are well-written, particularly the former. The various uses of video EEG telemetry are clearly delineated in chapter 16, and chapter 17 on the role of EEG in presurgical evaluation is excellent. Finally, chapter 18 on the various uses and abuses of the EEG is useful, and the points made on the expected diagnostic yield in pages 383–385 are valid, but extrapolating findings from studies on selected populations to “unselected populations” does not reinforce but weakens their essentially valid conclusions, and their tables need checking.

Although generally not a major shortcoming, typographical errors may be sometimes important, and must be addressed in the next edition. The illustrations are generally good, and come from digital and paper recordings, although sometimes legends could have been more informative.

In general, reading through the book makes one feel that some chapters were unevenly written. The amount and quality of information, and the decency, accuracy and richness of bibliography, and even the quality of the English language that ranges from lucid and elegant expression to somewhat awkward passages, seemed to fluctuate giving the impression that the book went rather hastily to press. This certainly does not do justice to the huge effort of the authors and the high quality of their work, and I am sure that improved editing in the next edition will make this book an invaluable reference worthy of the authors’ scopes and the needs in this ever-evolving area.

*Michael Koutroumanidis*

Department of Clinical Neurophysiology and Epilepsies, St Thomas’ Hospital, London, UK  
Tel: +44 20 7188 3954; Fax: +44 20 7188 1436  
E-mail: Michael.Koutroumanidis@gstt.nhs.uk