Clinical neurophysiology, 3rd ed., U.K. Misra, J. Kalita (Elsevier, a division of Reed Elsevier India Private Limited, New Delhi) 2014. 423 pages. Price: Not mentioned

ISBN 978-81-312-3467-9

This book addresses three main aspects of electrodiagnosis, *i.e.*, nerve conduction, electromyography and evoked potentials. These are discussed in terms of their technique, recording, interpretation and clinical applications.

The book starts off from the history to various practical aspects of clinical neurophysiology presented in a concise manner. Keeping the needs of postgraduate students, the authors at the end of each chapter have included important "learning points". While many clinicians develop a mental block when it comes to understanding basics of electrophysiology, its importance in having a sound understanding of the basics has been stressed. The authors introduce the readers to this very aspect starting with what is voltage, *etc.* The difference between monopolar and bipolar recordings and how the electrode tip can affect recordings has been explained well in the second chapter.

For the chapter on nerve conduction studies, they start with the basic anatomy and physiology and then the actual principles of nerve conduction. These are supported with drawings showing electrode placement with the associated responses. One of the important aspects covered in this book is about variables in recording and the normative data seen in Indian population. This would give a quick reference to what a normal or an abnormal recording is. Furthermore, tables have also been included to summarize tests for diagnosis.

The chapter on EMG (electromyography) is the highlight of this book. This being a difficult area in clinical practice, it would require considerable amount of skill and practice. Also, since the variables in recording are many, it would require patience and a rapport with the patients to make them relax and activate the muscles accordingly. Being aware of the pitfalls that one would encounter while recording, the authors have introduced the subject from the basics (anatomy, type of electrodes to be used, *etc*).

Since the subject is vast the authors have employed a practical approach by providing tables, line diagrams, recordings, path images, photographs, technique, overview of investigations and learning points.

Evoked potentials form the next part of this book. Though the importance of evoked potentials has considerably reduced with the advent of CT/MRI. it still forms a major armament in any diagnostic laboratory. Hence, the popular evoked potentials *i.e.*, Visual Evoked Potentials (VEP), Brainstem Auditory Evoked Potentials (BAEP), Somatosensory Evoked Potentials (SSEP), Motor Evoked Potentials (MEP) and Cognitive Evoked Potentials have been disussed. The MEPs are relatively new and one would require understanding the differences between magnetic and electrical stimulation and the stimulation coils to be chosen and their respective positioning. Certain precautions to be taken before using this method have also been discussed. The importance of using this technique particularly for establishing central conduction is well explained. The therapeutic application of rTMS, a field in its nascent stage has also been included.

One chapter, "Electrodiagnosis in Pediatric Practice" has been dedicated to the difficulty in performing tests in the paediatric group with their normative values being different from that in adults. This chapter also includes nerve conduction studies, needle EMG, evoked potentials and their relevance to clinical diagnosis, along with the precautions to be taken.

The book ends by summarizing the various neurological diseases with relevance of using electrodiagnostic methods for assessing and correlating them with disease progression (limitations and strengths).

Overall, this is a well-rounded book of practical importance for any neurologist. Inclusion of audio of recordings, particularly the EMG recordings in future editions may add further value.

K. Srinivasa Babu

Department of Neurological Science Christian Medical College Vellore 632 004, Tamil Nadu, India srinivas@cmcvellore.ac.in