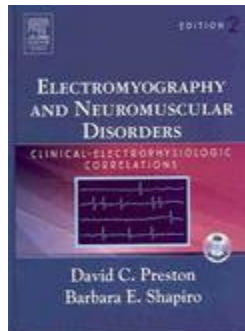# BOOK REVIEW

Electromyography and Neuromuscular Disorders: Clinical Electrophysiologic Correlations, 2nd edition, by David C. Preston and Barbara Shapiro

Elsevier, 2005, 704 pages.
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$227.00 CAD

Seldom in the realm of medical texts does one encounter a truly readable and accessible textbook that doesn't sacrifice content for clarity. Such a truly rare feat is accomplished in the most recent incarnation of Electromyography and Neuromuscular Disorders: Clinical Electrophysiologic Correlations by Preston and Shapiro. Although it has a relatively small readership base, limited to neurologists with an interest in electrophysiology, physiatrists or very enthusiastic residents and medical students, this book is frequently lauded and praised by all those who read it. This most recent edition includes updated content, but the most notable improvement is the addition of two companion compact discs. These CDs provide excellent quality audiovisual aids that compliment the content and help illustrate key electromyographical findings.

The book is divided into several sections. Sections one through five focus mainly on explaining fundamental principles of electrodiagnostic tests such as electromyography (EMG) and nerve conduction studies (NCS). In addition to comprehensive explanations about performing and interpreting basic studies, there are also chapters dedicated to other more specialized tests such as repetitive nerve stimulation and the blink reflex. Specific sections are also completely dedicated to important, but frequently overlooked topics such as sources of technical error, anatomical variants and basic statistics for electrodiagnostic studies. These chapters are particularly helpful as they demystify topics that are often not covered in adequate breadth and depth in other textbooks.

Section six focuses extensively on clinical-electrophysiologic correlations. This section includes chapters on all of the common mononeuropathies, such as median, ulnar and peroneal. Each chapter provides a detailed review of the relevant anatomy, common clinical presentations, common etiologies, a differential diagnosis, and an approach to the electrophysiologic evaluation. Diagrams and figures illustrating key findings or concepts are interspersed with the text and contribute significantly to clarifying complex concepts. Each chapter also includes several cases that enable the reader to work through actual clinical scenarios and apply the concepts learned in the chapter. These cases are instrumental in reinforcing key concepts and helping the reader consolidate their knowledge. Each of these chapters close with a summary and a Socratic style discussion with responses to commonly asked questions.

Section six also includes chapters on polyneuropathy, amyotrophic lateral sclerosis and other motor neuron diseases, radiculopathies, plexopathies, and sciatic neuropathy. Each of these chapters implements the same formula and meticulous approach employed in the earlier chapters, and focuses in detail how to differentiate between these different conditions on the basis of electrophysiologic testing. Numerous cases also help to illustrate important concepts on how to avoid common diagnostic pitfalls.

In addition to the ample content, this book also includes two companion CD-ROMs that nicely compliment the explanations in the text. The CDs run on both PC and Mac and provide a comprehensive library of common and rare EMG sounds, waveforms and findings. Each video clip is accompanied by a concise, yet complete explanation of what you are observing and the clinical significance of these findings. The CDs even include a quiz that the viewer can use to test their skills.

Overall, Electromyography and Neuromuscular Disorders: Clinical Electrophysiologic Correlations, 2nd edition is a superb book. Its two authors succeed in achieving the rare balance of writing a thorough and comprehensive text while still maintaining an accessible, easy to read style. This book would make a wonderful addition to the library of any neurologist, physiatrist or other physician with an interest in electromyography.

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