BOOK REVIEW

Guillain-Barré Syndrome: From Diagnosis to Recovery by Gareth J. Parry, M.D. and Joel S. Steinberg, M.D., American Academy of Neurology/Demos Health Publishers, 2007, 264 pp. Price: $19.95 (paperback).

Guillain-Barré Syndrome: From Diagnosis to Recovery is a catchy title that lives up to its name. So often neurological diseases are defined, diagnosed, and discussed with treatment and resolution uncertainty, a natural facet of the complexity of the central nervous system (CNS) and the peripheral nervous systems (PNS), leaving patients and caretakers at times with obscure understanding of how to cope with such a disease. There are unique challenges and obstacles to consider regarding Guillain-Barré Syndrome (GBS) and I believe this inherent ambiguity is well addressed in this American Academy of Neurology (AAN) book.

The authors present a precise definition beginning with schematic representation of the peripheral motor nerve organization and include a classification table of the four types of GBS. This section is then expanded to consider the effects of GBS discussing the primary symptoms of muscle weakness, abnormal sensations, and pain that are common at the onset of this disease, and rounds off with the possibilities of progression to the autonomic nervous systems that can occur as well. Parry and Steinberg include throughout the book the childhood diagnosis of Guillain-Barré Syndrome addressing treatment and recovery implications for both patient and family. Emotional issues arising in the incidence of this diagnosis are outlined and practical suggestions to minimize and/or resolve such obstacles are addressed. Promotion for early diagnosis and differentiation of resembling diagnoses are presented using case histories and citation of unusual forms of GBS with description of evolution from weakness to improvement and involvement of the CNS.

The authors then move to the diagnostic technical procedure citing again the anatomy of the nerve and how nerve conduction studies (NCS) and electromyogram (EMG) indicate the involvement and condition of particular nerves and help differentiate types of GBS. Of course, this section was the most interesting to me from a technologist’s point of view as it clarified our role and emphasized the importance of accurate and early diagnosis.

Several of the conditions and physical needs of the Guillain-Barré Syndrome patient are manifested with other illnesses and disease processes. The authors explain this with clarity so that the layman and supportive healthcare worker expand their understanding of how the debilitating processes affect the body and the purpose of diagnostic testing and treatments used to remedy the complications. It is pointed out
that NCS is also useful during the process to determine the progression and extent of recovery anticipated. Useful laboratory testing such as cerebrospinal fluid (CSF) testing by lumbar puncture and for exclusion of look-alike disease by blood testing are also described.

Causes of GBS are briefly discussed establishing that the most common trigger is an infection such as flu-like illness or diarrhea and is not actually an infection of the nerve. Vaccinations rarely trigger GBS since the 1976 swine influenza vaccination program was linked to an outbreak of GBS.

Due to the broad variances of impact, the length of time for recovery and treatment regimen is quite individualized. Two chapters thoroughly describe supportive treatments in the acute care setting following through rehabilitation to returning home. These are detailed accounts of possible complications, general overview of the physiological processes arising, and why and how treatments administered bring about resolution and recovery of this potentially debilitating process. A chapter devoted to immunotherapy explains the risks, benefits, and procedures of plasma exchange, intravenous immunoglobulin (IVIg), steroid treatment, and future potential therapies.

Universally with any type of illness, the patient and family concern is the outcome and what lifestyle altering conditions will occur at the end of the acute and rehabilitative stages. Guillain-Barré Syndrome: From Diagnosis to Recovery presents several possible scenarios and includes tables of possible medication therapies for neuropathic pain and their side effects. Long-term expectations and prognosis regarding childhood GBS as well as issues of recurrence, intimacy, emotional, and environmental factors, and complementary therapies are informatively and expressly written. This book concludes addressing the possibility of progression to chronic immune-mediated polyneuropathies, which would certainly reassure the patient who does not progress forward to a chronic disease and a springboard for those for which the situation presents itself.

My overall impression of this book is that the observations and descriptions are well presented. One of the physician authors is actually a recovered/rehabilitated GBS patient, hence the thoroughness and advocate for the emotional and psychological as well as the neurophysiologic concerns. Seldom do patients or technologists have opportunity to “walk through a disease process” in such an organized fashion. Technologists taking time to read this short, well written book will find an overall empathy for GBS patients they encounter as personal description and wisdom are intertwined throughout its pages as well as gaining a solid understanding of the physiologic process indicated by the diagnostic studies. The diagrams and tables are exceptional and depict the message intended; specific points are emphasized by print in text boxes; a complete glossary adorns the back; followed by resources for additional information from insurance to additional readings available. For the general practitioner, I believe this book outlining such an elusive disease would be a resource
they would enjoy for review as well as recommending it to their patients and their families of those so unfortunately diagnosed. It would offer to such patients understanding, a sense of control knowing what to possibly expect, and hope for a positive outcome that specifically speaks of their condition and situation. This publication merits addition to any medical library.

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BOOK REVIEW

Reading EEGs: A Practical Approach by L. John Greenfield Jr., James D. Geyer, and Paul R. Carney, Lippincott Williams & Wilkins, 2010, 358 pp. Price: $85.00.

Reading EEGs: A Practical Approach has a distinctive design that instructs by using interspersed questions which review key points in the chapters. The questions help the reader understand the content of the chapter. This method of teaching makes the book easy to read and comprehend. The main focus is to teach how to recognize and identify waveforms and patterns. Images of actual EEG recordings are used to show the different waveforms and patterns.

Recognizing the evolution of epileptiform and nonepileptiform patterns takes some time. By the time you finish this book you will have gained the necessary tools to evaluate patterns in EEGs.

The book begins by explaining the history of bioelectricity and how it leads to the development of EEG. The authors systematically take the reader through identification of waveforms by way of images and patterns. These images show specific waveforms which enhance the reader’s ability to comprehend the text. In addition, the authors use the art of analogy to further explain the information.

All of the book’s images and EEG examples are available online. This is a unique attribute. The videos that are available online are good quality but don’t explain all the episodes thoroughly. The only problem is the text for the book is not yet obtainable online. The ability to use the Internet, for those who are on the go, is one of the book’s great elements.

Chapters Seven through Ten cover the characteristics of seizures and neurological disorders. I found these chapters to be the most interesting, especially for the new technologist. The book also gives a brief introduction to sensory evoked potentials and polysomnography. The chapters on invasive EEG and epilepsy surgery give the reader a look into advanced neurodiagnostics and the entire epilepsy diagnosis process. The expansion of EEG and the advancements of computer technology are also addressed. The mathematical models and concepts associated with seizure detection are presented in the last chapter. This chapter is has the most complex text in the book and is of very little use to the new technologist.

Reading EEGs a Practical Approach is an informative textbook. Chapters One through Six focus on pattern recognition and identification of rhythms and waveforms. Chapters Seven through Twelve are for the more knowledgeable. The last two chapters are extremely advanced and are not for beginners. Overall, the
content in this book was effective with its analogies, illustrations, key point questions, and website. I would recommend this publication to everyone from beginners to Neurology residents.

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