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The Clinical Practice of Critical Care Neurology. 1st ed

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E.F.M. Wijdicks. Philadelphia, PA: Lippincott-Raven, 419 pp, 1997

This book reviews the clinical practice of neurology in the intensive care unit, emphasizing practice in day-to-day critical neurologic care. According to the author, the book is intended primarily for neurologists, specialists in neurologic intensive care, neurologists training in neurologic intensive care, emergency physicians, neurology and neurosurgical residents, and neuroscience nurses. Neuroradiologists are omitted from the above list, which raises questions about the book's relevance to the readership of this journal.

The detection of all the subtleties that are visible on a high-quality image, and the development of a differential diagnosis is the neuroradiologist's primary responsibility. Nonetheless, such an individual falls short as a consultant if the diagnosis is developed in a vacuum without knowledge of clinical neurology. Integration of the information from the images with the clinical presentation is crucial if an appropriate diagnosis is to be developed. An effective neuroradiologist not only can draw up a meaningful differential diagnosis, but can integrate the images into the clinical presentation. By practicing applied neuroradiology, suggesting an appropriate differential diagnosis, and directing the pattern of future imaging studies, a neuroradiologist becomes an effective consultant.

This book needs to be reviewed in light of these observations. The first 10 chapters discuss general principles of managing the critically ill patient, and though important reading, are probably of little use to the practicing neuroradiologist. The next 15 chapters consider the following disorders: subarachnoid, supra-, and subtentorial intracerebral hemorrhages; cerebral venous thrombosis; acute middle cerebral and basilar artery occlusions; cerebellar infarction; infections such as meningitis, abscess, and encephalitis; cerebral trauma; status epilepticus; Guillain Barre Syndrome; myasthenia gravis; and brain death. Numerous CT and MR images are included in these chapters and are correlated with the clinical presentations. The role of intravascular thrombolysis is discussed in a chapter on anticoagulation and thrombolytic therapy, and the role of intraarteral papaverine for vascular spasm is included in the subarachnoid hemorrhage chapter. Suprisingly, diffusion imaging is not discussed in the management of acute stroke.

The neuroradiology in this book is basic, but certainly adequate for the medical student, the beginning radiology or neurology resident, or the clinician in the neurology intensive care unit. I have few disagreements with the neuroradiologic content. One comment I would contest is that the Towne's projection is recommended to show the tip of the basilar artery; the transfacial view is much better.

The clinical information in the central 15 chapters is presented clearly and succintly, provided that the neuroradiologist reader has a solid practical knowledge of emergency neurology. The final five chapters describe the management of systemic complications that may affect the patient's possible recovery. Most of the chapters follow the schema of clinical recognition: neuroimaging and laboratory tests; immediate management; deterioration and its management; and outcome.

It is the quality of the didactic neurologic information that supports my recommendation of this book. Textbooks bridging the disciplines of neuroradiology and clinical neurology are few and far between. This is regrettable because the success of both specialties is augmented by this type of integration. Neuroradiologists will find this book valuable reading, particularly for the clinical contents of the middle chapters correlating neuroimaging with clinical presentations encountered daily in emergency practice.