
This third edition of Pediatric Neuroimaging by James Barkovich is a very extensive and exhaustive book of 850 pages.

The content of the book includes techniques and methods of pediatric neuroimaging, normal development of neonatal and infant brain, skull and spine, toxic and metabolic brain disorders, brain and spine injuries in infancy and childhood, congenital malformations of the brain and skull, phakomatoses, intracranial, orbital and neck tumors of childhood, hydrocephalus, congenital spine anomalies, neoplasms of the spine, infections of the nervous system and anomalies of cerebral vasculature.

In each chapter an exhaustive review of each different pathology is undertaken. For each condition, the etiopathogenesis and the clinical manifestations are described.

The chapters on Toxic and Metabolic Disorders, as well as Chapter 5 on Congenital Malformations of the brain and skull are extremely complete and they certainly represent an excellent reference for routine consultation as well as the confirmation of an exceptional case. Chapter 7 on Tumor Pathology also contains a very detailed pathological description for each histological type of tumor.

The iconography is outstanding, the pictures are of excellent quality with exhaustive legends. The collection of images is interesting, complete and well chosen in order to emphasize the most important radiological findings.

This book is certainly very complete and I think it represents an excellent tool, not only for the pediatric neuroradiologist but also for the adult neuroradiologist since many diseases, particularly the inherited syndromes, are often encountered in the adult population.

This book is an excellent tool that has a place in the library of the most senior neuroradiologist, but also is a wonderful manual for the in-training neuroradiologist fellow or resident.

Donatella Tampieri
Montreal, Quebec


The old joke, “Question: What is the shortest textbook in the world? Answer: Neurologic Therapeutics,” is no longer quite as funny as it used to be. There are indeed a number of pharmaceuticals used in the treatment of patients with neurological disease and Dr. Rowland and his fourteen contributors have put together a textbook that is designed to provide the essentials of information needed about the major classes of drugs, including the newest ones.

The eleven chapters either relate to drugs used to treat specific diseases: cerebrovascular disease, migraine and other headaches, dementia, Parkinson’s disease and other movement disorders; or to classes of drugs: sedative-hypnotics, antiepileptic drugs, neuromuscular drugs, antiemetic and antivertigo drugs, opioid analgesics, general anesthetics and anesthesia-associated drugs, and immunosuppressive drugs. Each chapter begins with a section on the pharmacologic and therapeutic aspects of the particular drugs in question and is followed by a series of references. In general the quality of the references appears to be good although their quality, in an evidence-based fashion, has not been commented upon specifically. There then follows a section in which the characteristics of each of the drugs discussed are given, much in the same way it is in the Canadian Compendium of Pharmaceuticals and Specialties. In the chapter on Therapeutic Agents for Cerebrovascular Disease for instance, 14 of the 23 pages are given over to the compendium type of presentation.

The chapters are succinct. The illustrations and tables are clear. The drugs are dealt with from a North American perspective. There are a few agents discussed that are not available in Canada. Unfortunately, in my opinion, the chapters do not provide a lot of therapeutic direction in the use of these medications. What is difficult to get from most textbooks and most compendia is an idea of the art of therapeutics. What should the starting dose of the drug be? What about a particular patient might make you start with a lower dose or a much lower dose and what should that dose be? How quickly should the dose be increased? Once the patient has reached the required dose, how long should you persist with the dose before considering the drug a failure? If the drug has failed, how should it be discontinued? For the most part, these questions are not addressed in a systematic fashion.

The book is a useful overview of the area of neurological therapeutics; however, since Canadian physicians all receive an annual copy of the Compendium of Pharmaceuticals and Specialties free, I suspect that they would find the compendium aspect of the book redundant and quickly dated. While the other sections provide a good introduction to the pharmacology of the medications discussed, they do not provide busy practitioners with some of the therapeutic nuances for which they might be looking in such a textbook.

Paul E. Cooper
London, Ontario


This text provides an overview of current research on brain plasticity and focuses on the biological and environmental factors that influence neurological reorganization following early cerebral insults. The text is based on a conference entitled The Role of Neuroplasticity in Rare Developmental Disorders which was sponsored by the National Institute of Neurological Disorders and Stroke and the National Institutes of Health in 1997. Although this is a multi-authored text, the chapters are comprehensive and the editors have organized the individual contributions in a logical fashion.

Part I consists of three chapters that introduce the mechanisms of brain development, principally neurobiological processes of elimination of synapses and the experiential effects of environment and learning. These chapters summarize observations from laboratory models but maintain a focus on application to human studies. Part II is comprised of three chapters which deal with mechanisms of reorganization of brain circuitry as demonstrated in