

stem, internal capsule, and posterior corona radiata. Deservedly with all the new techniques now available, this chapter, "Toxic and Metabolic Brain Disorders," has expanded from 85 to 113 pages, and the amazingly complete and updated bibliography includes 794 references, 341 more than those in the prior edition. This is typical of the refreshingly updated material one notes throughout the book in virtually every chapter. It is the weaving together of beautiful imaging, well written narratives, crisp new tables, and advanced technique that make this and all other chapters valuable.

As one would expect, the expanded 148-page chapter (68 pages more than the prior edition) "Congenital Malformations of the Brain and Skull" contains all the critical imaging information needed to understand the classic and unusual features of developmental brain anomalies. This chapter gives the reader explanations of why things look the way they do, not just the imaging appearance. The more inclusive tables is an important addition to this edition, particularly those tables that contain the tabulation of extracerebral lesions associated with neuronal migration disorders. Table 5-5 is 6 pages long and contains, in an easy-to-digest manner, complex information that is not easily obtainable from other sources. It divides the syndromes into a number of subgroups, including but not limited to chromosomal anomalies, dysmorphic syndromes, metabolic disorders (peroxisomal, mitochondrial, and cholesterol biosynthesis disorders), and multi-organ syndrome, among others. This has to be the most complete listing of such diseases to be found anywhere because it includes the genetic disruption, inheritance patterns, and the brain findings. A remarkable compilation indeed.

For those readers who are not daily engaged in the interpretation of pediatric neurology cases, one difficult area to sort

out and remember is the various milestones of brain sulcation, the chronology of myelination of various structures, and the timing of various synchondroses of the cervical spine. Barkovich does his best to help us by the inclusion of new tables and clear imaging, depicting all the stages/ages of development. Critical information on the changing spectra of the brain with maturation is important (although not substantially different from that in the prior edition) because the MR spectroscopy of a neonate's or child's brain cannot be evaluated without understanding how it differs from an adult spectra and what peaks are dominant at what age. The emergence of DTI has necessitated the new material on this subject, and baseline information on this and the variations on the theme of diffusion imaging are included.

Space does not permit the detailing of the other chapters and the many virtues of this textbook. To this reviewer's eye, Barkovich's 4th edition is the standard against which all other books in pediatric neuroradiology should be judged. No card-carrying neuroradiologist and no departmental library should be without this text. It is recommended in the highest possible terms.

BOOKS RECEIVED

Models of Seizures and Epilepsy. Alsa Pitkänen, Philip A. Schwartzkroin, and Solomon L. Moshé, eds. Burlington, Mass: Elsevier–Academic Press: 2006. 712 pages, \$149.95.

Psychoanalysis and Neuroscience. Mauro Mancina, ed. New York: Springer: 2006. 438 pages, 75 illustrations.