

point to specific anatomic or histological findings. A click on the letter results in the printed answer. Under each illustration is a short description which may include details such as function, physiology, neuro transmitters, anatomic relations etc.

There is a multiple choice quiz for each chapter (e.g. the chapter 5 quiz consists of 67 questions). Clicking on one of the answers produces a “correct” or “wrong” reply.

Each chapter has its own title list which can be searched. All of the illustrations in that chapter are listed by number and title. A click on the title will bring up illustration.

There is a “search” feature which is chapter specific. Type in the name and click enter and a title list appears which contains all slides in that chapter which illustrate the structure.

It is unfortunate that so much effort went into this book and CD and no review was made by a neurosurgeon or neurologist and particularly a neuroradiologist prior to its publication. Although the first five chapters in the book are good except for some of the errors already described, the last chapter and corresponding section on the CD are littered with errors. I cannot recommend this book as is because of the multiplicity of errors.

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LANGUAGE: NORMAL AND PATHOLOGICAL DEVELOPMENT. MARIANI FOUNDATION PEDIATRIC NEUROLOGY. VOLUME SIXTEEN. 2006. Edited by Dania Riva, Isabelle Rapin, Giovanna Zardini. Published by John Libbey Eurotext Limited. 265 pages. Price C\$94.

This is the second book published in the Mariani Foundation Pediatric Neurology Series dedicated to Developmental Cognitive Neurosciences. It is edited by three well-respected authors in this field, Dr. D. Riva, Dr. I. Rapin and Dr. G. Zardini and is subdivided into four major sections.

The first section, which is focused on “Normal Language Development”, provides a very in-depth review on acquisition of normal language in the early childhood years, starting with the relationship between gesturing and first words, lexical content and development of grammar and pragmatics. This section is written from the perspective of a developmental psychologist. The authors have been very involved in research in this area.

The second section, “Language and Neurofunctional Correlates” focuses on recent functional MRI work in this area, and is of greater clinical relevance to the child neurologist, given the potential of this tool as a non-invasive means of localizing language function. The MRI studies in young infants have shown that they have a lateralized network sensitive for listening to linguistic information. The evolution of functional MRI over time to involve activation of the left inferior and midfrontal and the left temporal regions are reviewed. The brain regions activated with lexical association tasks are compared between children and young adults, demonstrating that with age, there are certain brain regions which show decreased activity (mostly bilateral and diffuse in location), and others which show increased activity (mostly frontal and parietal). This section ends with an informative chapter on “Functional MRI in normal and pathological language development” which addresses the important

issue of language reorganization. Data from epilepsy, stroke, cortical dysplasia and dyslexia are included. The authors note that language can reorganize, usually to the homologous, non-dominant hemisphere rather than other brain regions, suggesting that only evolutionarily defined brain regions have the capacity to process language. Language recovery is dependent on a critical period for language acquisition in the right hemisphere, being much less complete after 6 years of age.

The third section, on “Language in Congenital and Acquired Brain Lesions/Maldevelopment” is the most relevant to the child neurologist. This section begins with a well-written chapter by Dr. Rapin on language in children with autistic spectrum disorders. A practical classification of developmental language disorders, with clearly identified, salient features of each subtype is outlined in a table. A second table provides key clinical points to differentiate autistic spectrum disorders from developmental language disorders – identifying the importance of assessing pragmatics, prosody and abnormal features such as echolalia. This section addresses some clinically important, but still poorly understood concepts regarding language, including the possible pathogenesis of language regression, the complicated relationship of seizures and epileptiform discharge, and the role of the cerebellum in language processing. Specific data are also provided on a small cohort of children with perisylvian polymicrogyria and a cohort with Williams syndrome, which challenges the view that linguistic ability in these children is ahead of their mental age.

The fourth section, “Developmental Language Disorders” summarizes diagnostic criteria for specific language impairment, and also provides some follow-up data regarding language function as well as academic and behavioral concerns in these children.

This book provides a detailed review of language and its associated disorders. Each chapter begins with a helpful summary paragraph which orients the reader to its contents. Some excellent summary tables are also provided in Section 3.

Although a potentially interesting read, the detail given in the first section would be excessive for many neurologists, and these chapters are better aimed at clinicians with particular interest in this area. This section would also benefit from a brief introduction, defining the various aspects of language subdivided into lexicon, grammar, pragmatics, syntax, etc. However, for child neurologists, Sections 2 and 3 (and particularly the chapters on functional MRI in various pathologies, and language in autistic spectrum disorders) are very relevant and readable. These chapters are “must-reads” for pediatricians and child neurologists, providing a number of clinical pearls. The final section would be more relevant for pediatricians, as these disorders would be less commonly followed by child neurology.

Overall, I would recommend this book for most pediatricians, and for any child neurologist who has a large developmental pediatric component to his/her practice.

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