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Neuroimaging Clinics of North America: Pediatric Neurovascular Disease—Diagnosis and Intervention, Vol. 17, No. 2

P. Lasjaunias, guest ed.; M. Castillo, S.K. Mukherjee, consulting eds. Philadelphia: Elsevier Saunders, 2007, 284 pages

With this edition of *Neuroimaging Clinics of North America*, Drs. Castillo and Mukherji have enlisted the expertise of Dr. Pierre Lasjaunias to compile an up-to-date collection of articles covering the spectrum of pediatric neurovascular disease. Many of the pathologic disorders covered have a low incidence relative to the general population. Therefore, the editors draw on the collaborative experience of an international collection of physicians practicing at referral centers that treat these rare and complex disorders. The text includes original articles on intracranial and extracranial vascular lesions, cross-sectional imaging, angiography, and neurointervention, along with papers pulled from other issues of the *Clinics* regarding pediatric anesthesia and cerebral infarction in sickle cell disease. The text is primarily aimed at neuroimaging techniques and findings, along with substantial information regarding endovascular therapy and the specific modifications required for application of these techniques in children.

The authors have generally tried to cover each topic completely including genetics, embryology, incidence, imaging techniques and findings, and treatment with special attention to image-guided therapies. The text includes 10 chapters in 128 pages. Within this brief volume, the authors discuss the primary topics of intracranial aneurysms, vein of Galen malformations, ischemic stroke, cerebral sinovenous thrombosis, and spinal arteriovenous shunts. Additional concepts covered are segmental neurovascular syndromes, hemangiomas, and maxillofacial vascular malformations. Also, as noted previously, are discussions of pediatric anesthesia and stroke in sickle cell disease.

There is variability in the depth to which some of the topics are covered. However, there are certain stellar articles such as “Current Endovascular Management of Maxillofacial Malformations” by Drs. Niimi, Song, and Berenstein and the article covering segmental neurovascular syndromes in children by Krings et al. Regardless of the slight variation in completeness

of each topic, all chapters are well written at a level easily understood by practicing neurospecialists, and most read more like a chapter than as a scientific article. The text is not designed to be a “cookbook” but rather to provide strategies for the appropriate diagnosis and treatment of these disorders. Each topic is extensively illustrated and often pulls from the archives of *Surgical Neuroangiography* by Drs. Berenstein and Lasjaunias (Springer-Verlag). Each article is also well referenced, and the reference list provides the interested reader an excellent collection of articles for further information.

Much of the treatment discussion is based on the personal experience and experiential bias of each author. In view of the rarity of some of the disorders, not all treatment recommendations are based on large, published series but, rather, on the decades of experience in evaluating and treating these patients by such luminaries in the field as Drs. Berenstein, Lasjaunias, and Ter Brugge. However, because of the international collection of authors (15 of the 24 practice outside of the United States), some of the devices used in treatment are not available to US physicians and referral centers. In addition, some of the concepts in treatment and outcome differ between continents, such as the comment on page 250 in which the authors note, “At present, brain AVMs [arteriovenous malformations] are not considered curable because of their size, location, and natural history.” Many North American vascular neurospecialists would strongly debate this concept. There are a few minor typographical errors, misspellings, or inaccurate image labels, but in view of the ability of the target audiences to recognize these and the serial timely publication of the *Clinics*, these are easily forgiven.

The target audience of the text is not specifically neuroimaging specialists, or even radiologists, but those who participate in the care of patients with these disorders. Many of the topics covered are available in larger textbooks, but a similar concise, up-to-date, specific topic collection such as this would be hard to find. Add to this the ability to obtain 60 American Medical Association category 1 continuing medical education credits through the University of Virginia, and you have an excellent, reasonably priced, educational tool for those interested in pediatric neurovascular disease. Also, as a practical matter, the audience may be much broader, as it is noted by Dr. Lasjaunias in the summation of his preface: “Despite their rarity, though, the neurovascular diseases in children are contributing largely to the understanding of adult ones, thus, justifying the attention paid to them.”

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