Editorial

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Pediatric vascular disorders are rare as compared to the adult disease process. Many pediatric neurosurgeons rarely treat these lesions in their daily practice, as they care for the more common entities such as hydrocephalus, brain tumors, congenital disorders, or adult vascular entities. However, many of the intracranial vascular lesions that are seen in the adult patient population are also present in the pediatric age. However, the incidence of lesions, clinical symptoms, imaging presentation, and especially the behavior may differ significantly. Intracerebral cavernous angiomas, for example, are more likely to bleed in children than in the adult patient group. In addition, in the pediatric age group, several vascular lesions may be encountered that are unique to the child's age such as vein of Galen aneurysmal malformations.

There have been significant advances in the neuro-imaging modalities which allow for early diagnosis and coordination of treatment plans for these rare but potentially devastating lesions. These modalities include ultrasonography (US), computed tomography (CT), magnetic resonance imaging (MRI), or digital subtraction angiography. The goal of every diagnostic test is to obtain as much detailed and specific information as possible using the least invasive diagnostic technique. Once the diagnostic tests have been performed, an informed decision about the treatment

options, progression of disease, or success of intervention can be discussed with the patients and their parents.

This is especially important in children as they typically do not have associated co-morbidities or other systemic illnesses. Most children are free of diabetes, hypertension, atherosclerosis, anemia, or heart disease. We also have learned that children do suffer strokes. In particular, we have a better understanding of stroke in children and the diagnostic challenges that children pose as compared to the adult population. We no longer are amazed why some children suffer ischemic attacks. We have new imaging modalities in addition to angiography, US, CT, and MRI to differentiate vascular lesions in children. Children can harbor aneurysms, arteriovenous malformations, dural fistulas, and other vascular entities similar to the adult counterpart. We also now can understand the best approach to treat these various lesions may be endovascular, microsurgery, radiosurgery, or a combination of these modalities. In the manuscript, we learn that children less than one may have the most common vascular malformation, a vein of Galen malformation, but may also harbor other vascular entities which require prompt and skilled care. It is anticipated that this annual issue will offer current knowledge about the spectrum of pediatric vascular disorders that may inflict children and adolescents, that it will offer potential diagnostic and treatment options available to the clinician and patients, and that it will correct misperceptions in these disease processes and nomenclature. We would like to thank in advance all the contributors who provided manuscripts for this Supplement issue, as this project would not have been possible without all their efforts and expertise. We also thank the editor for providing a forum for a dedicated issue on vascular disorders, and Amber Jones for her dedication to this project.

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