Introduction to ‘Advances in Pediatric Neuroradiology’

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This special supplement of *Pediatric Radiology* includes review articles of the Society for Pediatric Radiology’s first “Advances in Pediatric Neuroradiology” course, which was conducted under the leadership of Dr. Tina Young Poussaint and Dr. Thierry A.G.M. Huisman with the administrative assistance of Ms. Angela Davis. The course, conducted Oct. 24–26, 2014, was supported by the Executive Committee of the American Society of Pediatric Neuroradiology.

The 2.5-day course in Miami, FL, featured 29 expert course faculty members who collectively presented 30 lectures. One hundred sixty-five national and international attendees filled the conference room at the Loews Miami Beach Hotel. Conference presentations were divided into sections focusing on state-of-the-art neuroimaging modalities used to evaluate pediatric central nervous system disease and disorders of development. There were 17.5 h of American Medical Association Physician’s Recognition Award (AMA PRA) Category 1 Credits™. The course also offered a full day of self-assessment module (SAM) sessions (7 SAM credits).

The meeting provided a broad overview of pediatric neuroradiology, with lectures including updates on radiation safety and dose reduction, diffusion tensor imaging applications

in childhood, functional imaging in pediatric neuroradiology, evidence-based imaging in pediatric neuroradiology, intraoperative MRI, and central nervous system (CNS) sonography. Detailed lectures on trauma included trauma of the coverings and extra-axial spaces of the brain, non-accidental trauma of the spine, and advanced imaging of head trauma. In addition, presentations covered congenital and acquired pediatric spine anomalies; the phakomatoses; congenital anomalies in the fetus, newborn and infant; and an update on the understanding and assessment of hydrocephalus. The conference was rounded out with focused lectures on vascular diseases of childhood including CNS vascular malformations, pediatric stroke and CNS hemorrhage and hypoxic–ischemic injury in the newborn, as well as pediatric brain tumors with supratentorial tumors, infratentorial tumors and tumor mimics. A session on metabolic diseases of childhood was followed by two focused sessions on the pediatric head and neck with lectures on the skull base and cranial nerves, craniofacial abnormalities including the craniosynostoses, and imaging of the temporal bone. The course ended with lectures on developmental masses of the neck and head, neck tumors, and emergency imaging of the pediatric head and neck.

The meeting included dialogue and questions from the audience and SAM sessions with enthusiastic participation.

This peer-reviewed supplement to the journal *Pediatric Radiology* includes a summary of a subset of the course presentations. It is our hope that this supplement promotes greater understanding of imaging features of pediatric CNS diseases, which will aid in diagnosis and management of the children we serve.

Conflicts of interest The authors have no financial interests, investigational or off-label uses to disclose.

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