DEMYELINATING AND INFLAMMATORY CNS DISORDERS

MRI CHANGES COMPARED IN CHILD AND ADULT ONSET MS

Initial brain MRI characteristics of 41 children (<18 years) and 35 adults (>18 years) at multiple sclerosis (MS) onset were analyzed retrospectively in a study at UCSF Regional Pediatric and Adult MS Centers, and University of California, San Francisco. Children had a higher number of total T2- and large T2-bright areas than adults. Children more frequently had T2-bright foci in the posterior fossa and enhancing lesions than adults. Age was the main independent predictor for infratentorial involvement. (Waubant E, Chabas D, Okuda DT, et al. Difference in disease burden and activity in pediatric patients on brain magnetic resonance imaging at time of multiple sclerosis onset vs adults. Arch Neurol Aug 2009;66:967-971).

COMMENT. Higher disease burden, posterior fossa involvement, and rate of new lesions in pediatric-onset MS are characteristics associated with worse disability progression in adults.

ACUTE CEREBELLI TIS AND HYDROCEPHALUS

Two children, a girl aged 5 years and a boy aged 11 years, with acute cerebellitis, tonsillar herniation and hydrocephalus are reported from Schneider Children’s Medical Center of Israel, Petah Tikva, Tel Aviv. The 5-year old presented with vomiting, occipital pain, and right torticollis of 1 week’s duration. Two weeks previously, she had cough and rhinorrhea. Neurological examination revealed hyperactive reflexes, truncal ataxia, and dysmetria. MRI showed diffuse edema (hyperintensity on T2-weighted images) of the right cerebellar hemisphere and vermis, compression of 4th ventricle and brainstem, tonsillar herniation, compatible with cerebellitis. Serology for Mycoplasma pneumoniae was immunoglobulin M-positive and G-negative. Following treatment with dexamethasone, diuretics and vibramycin, signs resolved after 1 week. Follow-up MRI after 7 weeks showed regression of cerebellar edema, correction of cerebellar tonsils, and normal ventricles. The 11-year-old boy recovered after ventriculostomy; the cause for his cerebellitis was unknown. (Shkalim V, Amir J, Kornreich L, Scheuerman O, Strausssberg R. Acute cerebellitis presenting as tonsillar herniation and hydrocephalus. Pediatr Neurol Sept 2009;41:200-203).

COMMENT. Fulminant cerebellitis, a fatal, clinically isolated syndrome, is reported in a 9-year-old boy treated at Jawaharlal Nehru Medical College, Belgaum, India. (Kamate M, Chetal V, Hattiholi V. Pediatr Neurol Sept 2009;41:220-222). He presented with severe occipital headache, vomiting, and ataxic gait, associated with intermittent fever. Neurological examination showed a conscious, oriented, irritable child with papilledema, bilateral lateral rectus palsy, brisk reflexes, neck retraction and ataxia. CT head scan revealed hydrocephalus.