

with ADS, 35 were diagnosed with pediatric MS. The time to MS diagnosis applying the 2007 and revised 2012 definitions was compared. The revised 2012 definitions had sufficient sensitivity (80%) and high specificity (100%). MS diagnosis was made at first MRI and 3.4 months earlier ( $p=0.004$ ) applying the new definitions. (van Pelt ED, Neuteboom RF, Ketelsiegers IA, et al. Application of the 2012 revised diagnostic definitions for paediatric multiple sclerosis and immune-mediated central nervous system demyelination disorders. **J Neurol Neurosurg Psychiatry** 2014 Jul;85(7):790-4).

COMMENTARY. The new 2012 International Pediatric Multiple Sclerosis Study Group (IPMSSG) consensus definitions of acquired demyelinating syndromes [1] incorporate the 2010 revised McDonald criteria for MS and allow for a reliable and earlier MS diagnosis in all children, including those younger than 12 years.

#### References.

1. Krupp LB, et al. *Mult Scler.* 2013 Sep;19(10):1261-7.

## SEIZURE DISORDERS

### NEUROBEHAVIORAL COMORBIDITIES OF ACTIVE EPILEPSY

Eighty percent of children with active epilepsy in Sussex Schools, UK, who underwent psychological evaluation had a DSM-IV-TR behavioral disorder and/or cognitive impairment (IQ <85). Intellectual disability (ID) (IQ <70) (40%), ADHD (33%), and ASD (21%) were the most common neurobehavioral diagnoses, and only one-third had previously been diagnosed. Seizures in the first 24 months, generalized seizures, status epilepticus, and polytherapy were independently associated with ID, and ID was associated with a diagnosis of ASD. Epilepsy-related factors (e.g. age of onset, seizure frequency) did not independently predict behavioral disorders, suggesting that seizures per se are not the cause of behavioral problems. (Reilly C, Atkinson P, Das KB, et al. Neurobehavioral comorbidities in children with active epilepsy: A population-based study. **Pediatrics** 2014 Jun 1;133(6):e1586-93).

COMMENTARY. The identification of neurobehavioral comorbidities might lead to improved methods of control of both seizures and their associated behavioral disorders. As an example, the use of methylphenidate (MPH) for the management of comorbid ADHD may be associated with improved control of both seizures and ADHD. The addition of MPH is reported safe in children with ADHD and epilepsy whose seizures are controlled with AEDs [1]. Caution is advisable in the use of stimulants in cognitively impaired hyperactive children whose seizures are AED refractory [2].

#### References.

1. Millichap JG. Attention Deficit Hyperactivity Disorder Handbook : A Physician's Guide to ADHD. 2nd ed. New York: Springer; 2011:182.
2. Gonzalez-Heydrich J, et al. *Epilepsy Behav.* 2014 Jun 2;36C:102-107.