tested, models that distinguish between 3 quantitative classes (mild, moderate, and severe attention problems) provide the best fit to the data. The attention problem (AP) severe class contains all the subjects diagnosed with ADHD-combined subtype. Some subjects with ADHD-predominantly inattentive type are in the moderate AP class. Factor mixture analyses show that the CBCL AP syndrome varies along a severity continuum of mild to moderate to severe attention problems. Children with ADHD are at the extreme of the continuum. Framers of DSM-V will need these data in considering a change in classification to a continuum rather than discrete diagnostic categories of ADHD. (Lubke GH, Hudziak JJ, Derks EM, van Bijsterveldt TCEM, Boomsma DI. Maternal ratings of attention problems in ADHD: Evidence for the existence of a continuum. **J Am Acad Child Adolesc Psychiatry** Nov 2009;48(11):1085-1093). (Respond: Gitta Lubke PhD, Department of Psychology, University of Notre Dame, 18 Haggar Hall, Notre Dame, IN 46556. E-mail: glubke@nd.edu).).

COMMENT. The proposed continuum of attention problems is not a novel concept for ADHD. Epstein MA, Shaywitz SE and associates (**J Learn Disabil** 1991;24(2):78-86) examined distinctions between ADD, LD, and ODD/CD. Children referred to mental health settings differ from those referred to child neurologists, and "may be considered an extreme of the continuum of ADD." Many children with ADD will be represented by those referred primarily for ADD and LD, rather than those with ADHD and comorbid aggression referred for child psychiatry evaluation. Shaywitz BA and associates, defining and classifying learning disabilities and ADHD (**J Child Neurol** 1995;10(Suppl 1):S50-7), report several lines of investigation showing reading ability and reading disability as a continuum. Awareness of this relationship of the norm to abnormal in a seamless relationship is critical to our understanding of the basis for reading disability (and ADHD). This concept might also provide evidence of a decreasing severity pattern with increasing age, and gender differences.

The present DSM criteria for diagnosis of ADHD rely on symptoms alone, and criteria dependent on signs (perceptual and neurological deficits, including EEG epileptiform discharges in 25% cases) are not admitted. Perhaps the new DSM-V diagnostic criteria dependent on grading of severity will include a reference to the neurobiological and genetic nature of ADHD and objective signs. A genetic overlap between measures of hyperactivity/inattention and mood is demonstrated in twins with comorbid ADHD and depression (Cole J et al. **J Am Acad Child Adolesc Psychiatry** 2009;48(11):1094-1101). Gene-environment interaction (genetic sensitivity to environmental factors) should also be considered in diagnosis and treatment. (Thapar A, Lewis G. Editorial. **J Am Acad Child Adolesc Psychiatry** 2009;48(11):1051-1052).

CEREBRAL NEOPLASMS

INFANTILE INTRACRANIAL TUMORS

Patients presenting to the Children's Hospital of Eastern Ontario (CHEO) through the last 34 years with intracranial tumor in the first year of life were reviewed retrospectively for symptoms, management, and functional outcome. Of 18 cases identified, 12 were supratentorial (8 benign) and 6 infratentorial (all malignant histology). They represented 4.8% of all pediatric brain tumors seen over that period. Eight were of glial origin (7

supratentorial), 4 neuroectodermal, 2 teratoid rhabdoid, 2 choroid plexus, 1 meningioma, and 1 teratoma. Median age of presentation differed by lesion location, but not duration of symptoms. Raised intracranial pressure was more than twice as prevalent with posterior lesions and increased head circumference. Seizures occurred in 9 (50%); the tumor was supratentorial in 67% and infratentorial in 17% (p=0.04). Torticollis occurred in 4 (67%) of infratentorial and none of supratentorial tumors (p<0.01). Total resection was performed in 47%, and CSF shunt was more frequent with infratentorial tumor. Adjuvant chemotherapy was given in 44%, and radiotherapy in 17%, mainly in infratentorial tumors. Eight survived, 7 with supratentorial tumor, 5 to adulthood. Six are functionally independent. (Mehrotra N, Shanji MF, Vassilyadi M, Ventureyra ECG. Intracranial tumors in first year of life: the CHEO experience. **Childs Nerv Syst** Dec 2009;25:1563-1569). (Respond: Dr Michael Vassilyadi, Division of Neurosurgery, The Ottawa Hospital, Ottawa, Canada. E-mail: vassilyadi@cheo.on.ca).

COMMENT. In this young age group (<1 year of age), seizures occurred in 50% of patients, mainly with supratentorial tumors. In a study of 291 children with intracranial tumors treated at the Mayo Clinic over a ten-year period, seizures occurred in 17%; the tumor was supratentorial in 62% and infratentorial in 38%. Average age at seizure onset and at diagnosis was 4.9 and 6.7 years, respectively, in patients with supratentorial, and 4.8 and 5.1 years in those with infratentorial tumors. EEG was of localizing value in 75% of supratentorial tumors (88% of cortical tumors). A generalized dysrhythmia, maximal in the occipital regions and compatible with a lesion in the posterior fossa, was present in 44% of patients with infratentorial tumor. A delta pattern, indicative of an expanding lesion, occurred in 57% patients. (Millichap JG et al. The electroencephalogram in children with intracranial tumors and seizures. **Neurology** 1962;12:329-336).

NEUROMUSCULAR DISORDERS

ASCORBIC ACID IN CHARCOT-MARIE-TOOTH DISEASE

Ascorbic acid has been shown to reduce demyelination and improve muscle function in a transgenic mouse model of Charcot-Marie-Tooth disease (CMT1A). Aberrant expression of the myelin protein 22 gene, PMP22 is the cause of CMT1A, and large doses of ascorbic acid are shown to inhibit cAMP-mediated stimulation of human PMP22 expression. A 12-month, randomized, double-blind, placebo-controlled study of ascorbic acid in 117 adult patients compared to 62 receiving placebo found no significant difference between groups in neuropathy scores. Doses of ascorbic acid were 1 g and 3 g daily. The occurrence of adverse events did not differ between groups. (Micallef J, Attarian S, Dubourg O, et al. Effect of ascorbic acid in patients with Charcot-Marie-Tooth disease type 1A: a multicentre, randomized, double-blind, placebo-controlled trial. **Lancet Neurology** Dec 2009;8:1103-1110). (Respond: Dr Olivier Blin, CHU La Timone, Marseille, France.E-mail: Olivier.blin@ap-hm.fr).

COMMENT. Similar negative results were obtained in a placebo-controlled trial of ascorbic acid (30 mg/kg/day) in 81 children with CMT1A (2-16 years of age). (Burns J, Ouvrier RA, Yiu EM, et al. **Lancet Neurol 2009;**8(6):537-544).