HEADACHE DISORDERS

CHRONIC DAILY HEADACHE IN ADOLESCENTS

The prevalence of chronic daily headache (CDH), and its impact and related medication use or overuse in adolescents were examined at the Neurological Institute, Taipei Veterans General Hospital, and other centers in Taiwan. CDH was defined as headache occurring 15 days/month or more, average of 2 hours/day or more, and for more than 3 months. Of 7,900 subjects, 122 (1.5%) had CDH in the past year. The prevalence was 2.4% in girls and 0.8% in boys ($p<0.001$). CDH was sub-typed according to ICHD-II criteria as chronic tension-type headache in 65.6% or chronic migraine in 6.6%, and medication overuse CDH in 20%. A majority (67%) of all CDH subjects had some migraine or probable migraine features. Forty one percent consulted physicians, only 1 patient took prophylactic medication, 6 consulted neurologists, 48% reported that school performance was influenced moderately and 21% severely, and only 35% took sick leave for headaches during the past semester. (Wang S-J, Fuh J-L, Lu S-R, Juang K-D. Chronic daily headache in adolescents: prevalence, impact, and medication overuse. **Neurology** Jan (2 of 2) 2006;66:193-197). (Reprints: Dr Shuu-Jiun Wang, The Neurological Institute, Taipei Veterans General Hospital, Taipei, 112, Taiwan).

COMMENT. While chronic tension-type headache was the most common subtype of CHD in adolescents in Taiwan, a majority had headaches with some features of migraine.

In Turkish adolescents the prevalence of recurrent headache was 45.7%; migraine was diagnosed in 21.3%, and tension-type headache in 5.1%. Recurrent headaches were significantly more frequent in students with low-income families ($p=0.016$). The 1-year prevalence of chronic recurrent headaches was 21.7%. More than half (53.3%) of the students with headache took medication, and 37.3% saw a physician for headaches. (Unalp A, Dirik E, Kurul S. Prevalence and characteristics of recurrent headaches in Turkish adolescents. **Pediatr Neurol** Feb 2006;34:110-115).

ORBITOFRONTAL CORTEX IN CHRONIC ANALGESIC-OVERUSE HEADACHE

Glucose metabolism with 18-FDG PET in 16 chronic migraineurs (mean age 42.5 +/- 11 years) with analgesic overuse, before and 3 weeks after medication withdrawal, was compared to controls. During use of medication, the cerebral areas including the orbitofrontal cortex (OFC) were hypometabolic, while the cerebellar vermis was hypermetabolic. After drug withdrawal, glucose uptake became almost normal, except the OFC that showed a further metabolic decrease. Most of the OFC hypometabolism was due to the overuse of combination analgesics and/or an ergotamine-caffeine preparation in 8 patients. (Fumal A, Laureys S, Clemente LD et al. Orbitofrontal cortex involvement in chronic analgesic-overuse headache evolving from episodic migraine. **Brain** 2006;129:543-550). (Respond: Dr Arnauld Fumal, University Department of Neurology, CHR Hospital, bvld du Xlleme de Ligne 1, B-4000 Liege, Belgium).

COMMENT. Medication overuse headache is associated with persistent orbitofrontal (OFC) hypometabolism, while other cerebral areas show reversible metabolic changes. The authors speculate that hypoactivity in the OFC favors abuse of pain medication and predisposes the patient to relapse of medication overuse headache.

Analgesic overuse among adolescents with headache was studied in Norway from 1995-1997 (The Head-HUNT-Youth study) (Dyb G, Holmen TL, Zwart J-A. **Neurology** Jan (2 of 2) 2006;66:198-201). The prevalence of daily analgesic overuse headache was 0.5%; in girls 0.8% and boys 0.2%. The association between analgesic use and daily headache occurred with all headache categories, but was most pronounced for migraine and less for tension-type headache. Analgesic use and headache frequency showed a significant linear relationship.

ATTENTION DEFICIT HYPERACTIVITY DISORDERS

YOUNG ADULT OUTCOME OF HYPERACTIVE CHILDREN

Adaptive functioning of 149 hyperactive (H group) and 72 control children (CC group) in Milwaukee, Wisconsin, followed for at least 13 years to young adulthood (mean 20 years, range 19-25), was evaluated by interviews with participants, employer ratings, and high school records, and reported by researchers from Medical University of South Carolina, Charleston; Medical College of Wisconsin, Milwaukee; and University of Massachusetts Medical School, Worcester. The H group of CC had lower educational attainment, 32% failing to complete high school; more ADHD and ODD symptoms; lower job performance; fewer close friends and more social problems; were more likely to become parents (38% vs 4%); and had greater frequency of sexually transmitted disease (16% vs 4%). Conduct disorder in H subjects was predictive of failure to graduate, earlier sexual intercourse, and early parenthood, and ADHD and ODD were predictive of poor job performance and risk of being fired. (Barkley RA, Fischer M, Smallish L, Fletcher K. Young adult outcome of hyperactive children: adaptive functioning in major life activities. **J Am Acad Child Adolesc Psychiatry** February 2006;45:192-202). (Reprints: Dr Barkley, 1752 Greenspoint Court, Mt Pleasant, SC 29466).

COMMENT. The details of treatment of the hyperactive group are not available, but only a small percentage was taking stimulant or other psychiatric medication (8.1% of H group and 1.3% of CC). The H group also had a significantly lower IQ screening score than the CC subjects, both at study entry and at follow-up. Both of these factors could have accounted in part for the reported poor prognosis of the hyperactive group. The later complications listed with hyperactive behavior and ADHD emphasize the importance of early treatment intervention, early vocational assessment and job preparation, counseling on contraception, in addition to the medical management. The frequent lack of focus on appropriate vocational interests in adolescence may contribute to the poor job performance and outcome in adulthood.

Pharmacological differences in tolerability or ADHD symptom response were negligible in a trial of atomoxetine in children and adolescents. (Wilens TE et al. **J Am Acad Child Adolesc Psychiatry** Feb 2006;45:149-157).