Clarity Offered on ECGs, ADHD Medications

BY DAMIAN McNAMARA
Miami Bureau

The American Academy of Pediatrics and the American Heart Association have issued a joint statement clarifying recent recommendations made by the AHA on evaluating and treating children and adolescents with attention-deficit/hyperactivity disorder.

The original AHA recommendations suggested that a child's risk for adverse cardiac outcomes be evaluated before initiating pharmacologic treatment of ADHD ("Screen ADHD Patients First, Heart Group Says," CLINICAL PSYCHIATRY NEWS, May 2008, p. 17).

However, the joint statement, issued May 16, clarifies that treatment of a pediatric patient with ADHD should not be withheld because an electrocardiogram has not been done. The statement also says that certain heart conditions in children may be difficult, or in some cases impossible, to detect. So "the AAP and AHA feel that it is prudent to carefully assess children for heart conditions who need to receive treatment with drugs for ADHD," according to the statement.

In a separate policy statement, the AAP said on May 28 that it does not recommend screening ECGs "unless the patient's history, family history, or the physical examination raises concerns."

Both statements came in the wake of huge public reaction to the AHA's original recommendations.

The AHA statement, "made it seem to the public as if the policy had changed, when in fact it had not," Dr. Richard Friedman, coauthor of the 11-page AAP policy statement, said in an interview. "It was so highly publicized—that was the problem. It was on "The Today Show" and in the Wall Street Journal and the New York Times. People the next day were calling for appointments and saying 'My kid is on this medication and never had an ECG.' "

Dr. Friedman said the AAP thought it needed to respond quickly, given the huge response.

"The AHA statement created a tremendous amount of anxiety for parents and for physicians considering or ordering ADHD medications," said Dr. Friedman, professor of pediatrics, Texas Children's Hospital, Houston.

Dr. Timothy K. Knilans, also a coauthor of the AAP statement, said the AHA's recommendations were surprising "given the absence of any new scientific information."

ADHD, which is common in the congenital heart disease population, "is severely undertreated, as cardiologists aren't fully aware of the problem and pediatricians are afraid to use the drugs in this population. This is the problem that the AHA group should have focused on—not screening for all kids," said Dr. Knilans, director, clinical cardiac electrophysiology and pacing, Cincinnati Children's Hospital Medical Center.

On the same day the joint statement was released, the AHA released an erratum to its scientific statement, Dr. Rose Marie Robertson, chief science officer of the AHA, Dallas, said in an interview.

The erratum lists 19 corrections. For example, the original news release stated that children diagnosed with ADHD "should" have an ECG before beginning treatment with stimulant drugs.

"The recommendation in the scientific statement was intended to indicate that it is reasonable for a physician to consider ordering an ECG in children with ADHD if they feel it is warranted," Dr. Robertson said.

The American Academy of Child and Adolescent Psychiatry; the American College of Cardiology; Children and Adults with Attention-Deficit/Hyperactivity Disorder; the National Initiative for Children's Healthcare Quality; and the Society for Developmental and Behavioral Pediatrics also endorsed the clarification.

"In practical terms, there is no change in policy for getting ECGs for patients," Dr. Friedman said. ■

The documents cited in this article are available online at www.aap.org/new/ecg-adhd.htm.

ADHD Unaffected by 8-Week Course of St. John's Wort

BY MARY ANN MOON
Contributing Writer

An 8-week course of St. John's wort did not improve attention-deficit/hyperactivity disorder symptoms in what researchers described as the first-ever randomized clinical trial of the herbal remedy in children and adolescents, according to a report in JAMA.

Compared with placebo, St. John's wort—one of the three most common herbal treatments for ADHD in the pediatric population—did not improve hyperactivity, impulsivity, or inattentiveness, reported Wendy Weber, Ph.D., of Bastyr University's School of Naturopathic Medicine, Kenmore, Wash., and her associates.

As many as 30% of children with ADHD fail to respond to, or cannot tolerate, pharmaceutical medicine for the disorder, so many parents turn to complementary or alternative medicines. St. John's wort (*Hypericum perforatum*) has been found to inhibit the reuptake of norepinephrine, so in theory it might be beneficial in ADHD.

Dr. Weber and her associates studied 54 healthy subjects aged 6-17 years who met DSM-IV criteria for ADHD based on structured diagnostic interviews. Half the subjects were randomly assigned to take a 300-mg capsule of St. John's wort, and the other half were to take placebo capsules, three times daily (before school, after school, and before bed), for 8 weeks. ADHD symptoms were assessed at office visits at baseline and every 2 weeks thereafter using the ADHD Rating Scale–IV, an 18-item standardized instrument for weekly assessment of treatment response. The Clinical Global Impression Improvement Scale also was used at weeks 4 and 8 to evaluate whether global impairment worsened, remained steady, or improved.

The treatment's potential effect on other behavioral problems was assessed using the Child Behavior Checklist and Youth Self Report Form. Parents also reported their assessments of ADHD symptoms by completing the Conners' Parent Rating Scale at baseline and at the conclusion of the study.

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St. John's wort (flower shown above) inhibits the reuptake of norepinephrine.

Finally, changes in quality of life were evaluated using the PedsQL form.

Possible adverse effects were tracked using a measure of 76 potential adverse effects. There were no significant differences between the two groups in ADHD symptoms on any assessment, either in the intention-to-treat analysis or the per-protocol analysis, Dr. Weber and her associates said (JAMA 2008;299:2633-41).

The subset of children who had never taken pharmaceutical medication for ADHD before this study also showed no improvement beyond that achieved with placebo, the investigators added.

The study was supported by grants from the National Center for Complementary and Alternative Medicine, an agency of the National Institutes of Health. Dr. Weber reported no conflicts of interest. ■

Shorter Wear Times for Daytrana Patches Effective

BY DOUG BRUNK
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Children with attention-deficit/hyperactivity disorder who wore Daytrana methylphenidate transdermal patches for stretches of 4 or 6 hours experienced improvements in their ADHD symptoms, results from a multicenter controlled trial of 117 young patients showed.

The findings "suggest that the duration of effect for ADHD is related to the length of time that the patch is worn, thereby offering flexibility in the duration of effect on ADHD up to the recommended 9-hour wear time," Dr. Timothy E. Wilens and his associates reported.

A previous study showed improvements in ADHD symptoms from 2 to 12 hours with a 9-hour wear time; but prior to the current trial, the researchers explained, no data were "available on the duration of action of shorter wear times of the patch or the length of time after patch removal that symptoms of ADHD return appreciably."

For the multicenter, placebo-controlled, randomized, double-blind, crossover study, 117 children with ADHD aged 6-12 years underwent optimal methylphenidate dosing over a 5-week period using 10-, 15-, 20-, or 30- mg patches worn for 9 hours. The efficacy of 4- and 6-hour wear times was then assessed in analog classroom sessions during weeks 6-8. Follow-ups were conducted at week 12 (J. Am. Acad. Child Adolesc. Psych. 2008;47:700-8).

The main efficacy measures were the Swanson, Kotkin, Agler, M-Flynn, and Pelham Rating Scale (SKAMP) deportment scale and the Permanent Product Measure of Performance (PERMP) math test. Secondary efficacy measures included the Attention-Deficit/Hyperactivity Scale IV, the Clinical Global Impressions-Improvement, the Parent Global Assessment, and the Conners' Parent Rating Scale.

Dr. Wilens of Harvard Medical School and the pediatric pharmacology unit at Massachusetts General Hospital, both in Boston, and his associates reported that all efficacy measures indicated that the 4- and 6-hour wear times improved ADHD symptoms, and that medication effects as measured by the SKAMP deportment scale and the PERMP math problems assessment decreased 2-4 hours after patch removal.

Adverse effects were mild or moderate and limited to those most commonly seen with traditional methylphenidate treatment: decreased appetite and headache.

The study was funded by Shire Development Inc., which manufactures the Daytrana patches. Dr. Wilens and his associates disclosed that they receive or have received research support from, acted as a consultant to, and/or served on the speakers bureaus of many pharmaceutical companies, including Shire.

The researchers said further studies are needed "evaluating the impact of variable wear times on specific short- and longer-term adverse effects." ■