Aripiprazole Approved for Autistic Irritability

**BY ELIZABETH MECHCATTIE**

H O N O L U L U — High-dose OROS methylphenidate was associated with small but statistically significant increases in systolic blood pressure and heart rate in a month, open-label study in adolescents.

The study found no significant long-term increases in diastolic blood pressure or in electrocardiographic measures. Dr. Paul Hammerness said at the annual meeting of the American Academy of Child and Adolescent Psychiatry.

The findings are consistent with studies involving younger children and lower doses, said Dr. Hammerness of Massachusetts General Hospital and Harvard Medical School, Boston.

Because of concerns about possible associations between stimulant medications for attention-deficit/hyperactivity disorder (ADHD) and cardiovascular complications—including sudden cardiac death—the Food and Drug Administration in June 2009 recommended that physicans pay special attention to a child’s cardiovascular system when prescribing stimulants.

The study involved 114 adolescents with a mean age of 14 years at baseline (range 12-18 years). All were healthy, and all had a diagnosis of ADHD based on full DSM-IV criteria. The trial was intended to evaluate use of OROS methylphenidate for prevention of cigarette smoking (J. Pediatr. 2009;155:84-9).

The beginning dose of OROS methylphenidate was 0.5-0.75 mg/kg per day, and that was titrated upward to a maximum of 1.5 mg/kg per day by week 1. At week 6, the mean total daily dose was 63 mg, and 50% of the participants were taking 72 mg or more.

As expected, OROS methylphenidate was highly effective in treating the participants’ ADHD. Their ADHD Rating Scale scores declined from a mean of 26.9 at baseline to 9.7 at week 6.

Of the 114 participants who entered the study, 73% were male, and their mean body mass index was 22.6 kg/m². At the time of data analysis, 57 participants had completed 6 months of treatment.

Mean systolic blood pressure at baseline was 113 mm Hg, and that increased to 117 mm Hg at 6 months, a significant increase. Mean diastolic blood pressure began at 63 mm Hg, increased significantly to 65 mm Hg at week 6, but then returned to 64 mm Hg at 6 months. Mean heart rate began at 82 beats per minute, increased significantly to 86 beats per minute at week 6, and remained at about that rate at 6 months.

The investigators found no statistically significant or clinically meaningful changes in ECG variables, including PR, QRS, or QTC.

Reasoning that any adverse cardiovascular effects of OROS methylphenidate might be restricted to certain subsets of adolescents, the investigators separately analyzed those 16 participants who met criteria for prehypertension or hypertension at baseline, based on at least one blood pressure reading above the 90th or 95th percentile.

The investigators found no impact of abnormal premedication blood pressure readings on blood pressure changes during treatment.

Participants experienced no serious adverse events or serious cardiovascular adverse events during the study. Ten of the 114 subjects reported one or more subjective cardiovascular complaints, including palpitations, chest pain, and fast or racing heartbeat. Of those, six had a lifetime diagnosis of conorbid anxiety disorder.

One participant discontinued treatment because of recurrent palpitations. She had a lifetime history of conorbid generalized anxiety disorder and migraines, but she showed no change from baseline in any cardiovascular measurement, and her primary care physician did not find her complaints to be consistent with cardiac disease. She later used a different stimulant medication with no subsequent cardiovascular symptoms.

“The FDA continues to review and still concludes that the overall risk-benefit ratio supports the use of stimulant medications for ADHD,” Dr. Hammerness said. But he did recommend that clinicians carefully evaluate a child’s cardiovascular symptoms and family history before prescribing stimulants.

In particular, clinicians should look for a family history of cardiovascular disease at a young age, such as QT syndrome, cardiomyopathy, or a cousin who died suddenly during exercise.

Dr. Hammerness acknowledged serving as a speaker for, receiving research funds from, or participating in CME activities or professional talks supported by Abbott, McNeil, and Shire Pharmaceuticals; and participating in research studies funded by Bristol Myers Squibb, Cephalon, Eli Lilly & Co., Johnson & Johnson, McNeil, New River, Novartis, Organon, Otsuka, Pfizer Inc., Shire, and Takeda. This study was sponsored by McNeil, which markets OROS methylphenidate under the brand name Concerta.

**Small CV Changes Seen With Concerta**

**BY ROBERT FINN**

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**Economic Woes Taking a Toll On Addiction Services**

**BY ELIZABETH MECHCATTIE**

B E T H E S D A , M D . — The current economic downturn has had a substantial impact on the prevalence and treatment of addiction in the United States, according to preliminary findings, Paul Ro- man, Ph.D., said at the annual meeting of the Association of Medical Education and Research in Substance Abuse, which was sponsored by Brown Medical School.

Dr. Roman and Amanda J. Abraham, Ph.D., both of the University of Georgia, Atlanta, collected data during interviews with treatment program administrators in the Clinical Trial Program (198), pri- vately run programs (345), and the Na- tional Institute of Alcohol Abuse and Al- coholism (350).

The administrators reported a mean reduction of 13% in overall budget, 22% in grant funding, 17% in Medicaid income, and 12% in insurance payments. The dip in grant allocations alone was corre- lated with an increase in uncollectible revenues, a decrease in staff and treat- ment slots, and the implementation of hiring freezes, he said.

Staff losses and hiring freezes cut across the board, and they support staff categories: 14% of inter- viewees reported cuts at management level, 27% reported counselor losses, and 23% support staff losses. One-third of those interviewed said there had been hiring freezes across all three staff cate- gories. Commensurate with these staff cuts, particularly at the counselor level, was a reduction in the number of treat- ment slots, which was reported by 12% of the interviewees. At the same time, there was a mean overall increase of 18% in patient volume.

Dr. Roman had no financial disclo- sures. The study was funded by National Institute of Drug Abuse and the NIAAA.

—Renée Matthews