# Autism-Specific Screen Outdoes General Tool

BY MARY ELLEN SCHNEIDER
*New York Bureau*

PHILADELPHIA — Autism-specific screening conducted at critical intervals is more effective in the early identification of autism than is using a general developmental instrument as a first-line screening technique, Dr. Susan E. Levy said at the annual meeting of the Society for Developmental and Behavioral Pediatrics.

In a study of 152 children aged 15-30 months, a general pediatric developmental screening tool did not adequately examine certain "red flag" items for autism that are included in autism-specific screening tools, she said. For example, some of these red flags include when children do not babble or point, do not make meaningful gestures by age 1 year, have poor eye contact, or are losing language or social skills.

Dr. Levy, of Children's Hospital of Philadelphia, and her colleagues at the University of Pennsylvania School of Nursing, Philadelphia, compared the effectiveness of a general screening tool, the Parents' Evaluation of Developmental Status (PEDS), to an autism-specific tool, the Modified Checklist for Autism in Toddlers (M-CHAT), in screening for autism spectrum disorders in the primary care setting.

The study involved administering a general developmental screening tool first, and then an autism-specific screening of children who failed the general developmental screening tool.

The researchers enrolled 152 children with a mean age of 21 months at the Children's Hospital of Philadelphia urban pediatric primary care center and first administered the PEDS and then the M-CHAT instruments. The results were analyzed taking into account the two screening strategies. The PEDS found that in 75% of the children, parents had nonsignificant concerns or no developmental or behavioral concerns. Parents reported one or more concerns for 25% of the children. In contrast, about 14% of children in the sample scored as at risk for autism spectrum disorders through the M-CHAT, and 86% were considered not at risk.

Of the 114 children who did not have significant concerns after the PEDS, 98 (86%) passed the M-CHAT and 16 (14%) were scored as at risk for autism spectrum disorders after the M-CHAT screening tool. Of the 38 children who had concerns noted with the PEDS, 32 (84%) passed the M-CHAT and 6 (16%) were scored as at risk with the M-CHAT.

"Children who screen negative for general developmental concerns may score positive on the M-CHAT and vice versa," Dr. Levy said.

In this study, the PEDS screening tool did not appear to be a good substitute for the M-CHAT when screening specifically for autism spectrum disorders in a general pediatric practice in an urban setting, Dr. Levy said.

Instead, the data seems to support using an autism-specific screening tool for all children at critical ages (18 months, 24 months, and 30 months). The children who score as having concerns on the PEDS but not on the M-CHAT may be at risk for other delays or disabilities.

These interim results are part of an ongoing study conducted by the Pennsylvania Center for Autism and Developmental Disability and Research and Epidemiology (PA-CADDRE), which is funded by the Centers for Disease Control and Prevention. The Pennsylvania site is one of six centers around the country collaborating on projects to establish the prevalence, etiology, and risk factors of children with autism spectrum disorders, Dr. Levy said. ■

# Concerta Effective for ADHD Plus Epilepsy in Small Study

BY DOUG BRUNK
*San Diego Bureau*

SAN DIEGO — In children with attention-deficit hyperactivity disorder and epilepsy, treatment with osmotic release oral system methylphenidate produced no serious adverse events, no increase in seizures, and a significant decrease in the ADHD Rating Scale scores, compared with children who took placebo.

The study, which is the largest placebo-controlled trial of its kind, supports the findings of two older studies of methylphenidate and children with epilepsy and ADHD, but it marks the first time that OROS MPH (Concerta) has been evaluated in this population, Dr. Joseph Gonzalez-Heydrich reported during a poster session at the annual meeting of the American Academy of Child and Adolescent Psychiatry.

"Our study indicates that OROS MPH is effective in kids who have epilepsy plus ADHD who had been at least 1 month seizure free" prior to treatment, Dr. Gonzalez-Heydrich of the department of psychiatry at Children's Hospital, Boston, said in an interview. "It's also safe. We haven't seen any increase in seizures."

Dr. Gonzalez-Heydrich and his associates randomized 27 children with ADHD and epilepsy to receive either OROS MPH at a target dose of 18, 36, or 54 mg/day, or placebo, then crossed them over to the other regimen. The mean age of the children was 11 years, and all were taking anticonvulsants. The children were seizure free for 1 month but reported having a seizure within 5 years of study enrollment.

Each child remained at the maximum dose of OROS MPH for up to 1 week before crossing over into the placebo arm of the study. Each week, the researchers recorded adverse events and administered the ADHD Rating Scale (ADHD-RS) and the Clinical Global Impressions Scale (CGI).

"Change in the ADHD-RS total, hyperactive, and inattentive scores all revealed a significant main effect of week of treatment and a significant interaction of treatment and week," the researchers wrote in their poster. Improvement from baseline was greater during the treatment phase regardless of the dosage level.

The researchers also noted that active medication and higher dosage predicted a greater decrease in the CGI severity scores.

**During treatment, a more robust response was seen in boys than in girls.**

**DR. GONZALEZ-HEYDRICH**

No adverse events were observed, and seizures occurred during the active treatment and placebo phases in two patients. In addition, one other patient experienced a seizure during the placebo phase but not during the active treatment phase.

During the treatment phase, a more robust response was seen in boys, compared with girls. That difference "may have something to do with the threshold for girls being referred for treatment" but it remains unclear, Dr. Gonzalez-Heydrich said.

He acknowledged that a key limitation of the study was its small sample size. "We need a larger study," he said. "We'd also like to start including kids with more frequent seizures. Then you'd really have the power to tell whether the seizures are affected [by the treatment] or not."

The study was funded by a grant from the National Institute of Mental Health. McNeil Pediatrics, which manufactures Concerta, provided the study drug and the matching placebo.

Dr. Gonzalez-Heydrich also disclosed that McNeil covered his expenses to present the work at the meeting. ■

# *Atomoxetine May Improve Comorbid ADHD, Tourette's*

BY DOUG BRUNK
*San Diego Bureau*

SAN DIEGO — Atomoxetine appears to be safe in children and adolescents who have attention-deficit hyperactivity disorder and comorbid Tourette's syndrome, Dr. Thomas J. Spencer reported during a poster session at the annual meeting of the American Academy of Child and Adolescent Psychiatry.

"My clinical sense is that's a great drug for the combination," said Dr. Spencer, a child and adolescent psychiatrist who is assistant director of the pediatric psychopharmacology unit at Massachusetts General Hospital, Boston. "That being said, if kids have really bad tics, you use neuroleptics, pretty powerful drugs. But tics often fluctuate. So if the tics are mild or moderate, or if they drift into that range," atomoxetine is an option.

**'If kids have really bad tics, you use neuroleptics. … But tics often fluctuate. So if the tics are mild or moderate, or if they drift into that range,' Straterra is an option.**

As part of a larger study of children with ADHD and comorbid tic disorders, Dr. Spencer and his associates conducted a subanalysis of 117 children with ADHD and Tourette's syndrome (Neurology 2006;65:1941-9). The mean age of the children was 11 years, and most (87%) were boys.

The children were randomized to double-blind treatment with placebo or 0.5-1.5 mg/kg per day of atomoxetine (Strattera) for about 18 weeks. There were 56 children in the placebo group and 61 in the treatment group.

According to results of the Yale Global Tic Severity Scale and the Clinical Global Impressions severity of tic/neurologic symptoms score, children who received atomoxetine had a significantly greater reduction in tic severity between baseline and end of treatment, compared with the placebo group. However, results of the Tic Symptom Self-Report total score revealed that atomoxetine treatment did not significantly reduce tic severity, compared with children in the placebo group.

Children who received atomoxetine achieved significantly better ADHD Rating Scale total and subscale scores and Clinical Global Impressions overall severity scores, compared with their counterparts in the placebo group. However, the researchers wrote in the poster that atomoxetine treatment was "associated with increased pulse rate, decreased body weight, and significantly higher rates of decreased appetite and nausea. No other clinically relevant treatment differences were seen in any other vital sign, adverse event, laboratory parameter, or electrocardiographic measure."

The study was funded by Lilly Research Laboratories. Dr. Spencer disclosed that he is an adviser and speaker for Eli Lilly & Co. He has also received research support from the company.

Atomoxetine is approved by the FDA for treatment of ADHD in children, adolescents, and adults. ■

Pages 30a—30b