Parent-Completed Tool IDs Development Issues

BY SHARON WORCESTER
Southeast Bureau

Incorporating a parent-completed developmental screening tool into 12- and 24-month well-child office visits in a busy practice increased referrals for further evaluation by 224% in a recent study.

The finding underscores the need for increased attention to providing developmental screening in the office setting, as is recommended by the American Academy of Pediatrics, according to Dr. Kevin Marks, one of the study authors.

Indeed, a July 2006 AAP policy statement calls for formal, systematic, developmental screening at 9 months, 18 months, and between 24 and 30 months of age, and for developmental surveillance at every pediatric visit (Pediatrics 2006;118:405-20), Dr. Nancy Murphy, chair of the AAP Council on Child Development, and associate professor of pediatrics at the University of Utah, Salt Lake City, said in an interview.

The formal screening is particularly important, because it seems that the very children who benefit the most from early intervention—such as children with mild delays, children from low socioeconomic backgrounds, and younger children with early signs of autism—often are the same children whom physicians fail to identify in a timely manner without the help of universal, periodic, standardized developmental screening, said Dr. Marks of PeaceHealth Medical Group in Eugene, Oregon, where the study was conducted.

For their study, Dr. Marks and his colleagues asked 1,428 caregivers who brought a child in for a 12- or 24-month visit to complete the validated Ages and Stages Questionnaire (ASQ) in the office or to take it home and mail it back; 54% did so. Twenty health care workers—18 board-certified pediatricians and 2 nurse practitioners—who were blinded to the ASQ results, also evaluated the patients using the Pediatric Developmental Impression (PDI), a tool developed especially for the study to capture physician clinical impression of development.

Children with previously diagnosed developmental delays or disorders were excluded from the study.

A total of 107 referrals (82 unique cases) were sent to a local Part C Individuals with Disabilities Education Act (IDEA) early childhood development agency for further evaluation based on the combined ASQ and PDI results, compared with only 33 referrals made in a control year (224% increase). Based on the PDI alone, 68% of the 107 referred during the study period would not have been referred based on clinical impression alone.

Thirty-eight of the patients referred qualified for special services, an additional 44 were scheduled for developmental monitoring because of "suspect development that may lead to future eligibility," and 25 did not qualify for services or monitoring under strict state IDEA eligibility requirements, Hollie Hix-Small, Ph.D., of the University of Oregon, Eugene, and her colleagues (including Dr. Marks) reported (Pediatrics 2007;120:381-9). Two of the study authors, Jane Squires, Ph.D., and Dr. Robert Nickel, are ASQ authors who receive publication royalties.

Of note, 96% of the referrals made based on the PDI were children who qualified for developmental services as determined following referral, suggesting that physicians should "trust their intuitions about a child's developmental status if they suspect a delay," Dr. Marks said in an interview.

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DR. MARKS

Referral based on the PDI was significantly predicted by suspected communication delay (odds ratio 136.50) and gross motor delay (odds ratio 58.80).

However, physicians must realize their observational limitations since 37 of 82 early intervention–eligible or monitored children would have been missed on physician impression alone, he added.

The findings of the study prompted a permanent—and more extensive—change in the practice's developmental screening protocol, Dr. Marks said.

"We quickly changed to a 12-, 24-, and 36-month universal ASQ screening schedule and will soon likely add on the 18-month ASQ," Dr. Marks said, noting that the greatest effects of the use of the ASQ in the office-setting in the study were seen in the 12-month-old children. For example, 5 referrals were made in the 12-month age group in the control year, compared with 33 based on the ASQ in the screening year and a total of 40 based on the combined ASQ and PDI referrals in the screening year; in the 24-month-old age group, 28 referrals were made in the control year, compared with 44 based on the ASQ in the screening year and a total of 67 based on the combined ASQ and PDI referrals in the screening year.

"We have also been heavily encouraging Medicaid, younger [under 21 years old] and Spanish-speaking parents to fill out the ASQ before or immediately after the well-child visit," he said, explaining that this tactic has improved the post-study ASQ return rates.

While the 54% return rate is adequate for study purposes, it is important that a better rate be achieved in routine practice, he noted.

The approach used in the study—completing the ASQ in the office or mailing it back later—proved feasible. ■

Schizophrenia Patients Respond To Over-the-Counter Supplement

BY BRUCE JANCIN
Denver Bureau

VIENNA — *N*-acetylcysteine, an inexpensive supplement widely available over the counter in health food stores, proved safe and effective as adjunctive therapy for chronic schizophrenia in a 6-month, double-blind, placebo-controlled trial, Dr. Michael Berk said at the annual congress of the European College of Neuropsychopharmacology.

"We saw a clinical effect on mood that was really quite exciting," said Dr. Berk, vice president of the International Society for Bipolar Disorders and professor of psychiatry at the University of Melbourne.

The improvement involved the negative symptoms of the disease. The gains arrived slowly and accumulated over time, with a benefit first becoming apparent after about a month, and then disappeared completely during a month-long poststudy washout phase. *N*-acetylcysteine (NAC) had no effect at all on positive symptoms, as measured by scores on the positive subscale of the widely used Positive and Negative Symptoms Scale (PANSS).

The mechanism of benefit for this novel therapy is believed to be enhanced scavenging of excess neurotoxic free radicals in the brain. NAC readily crosses the blood-brain barrier. It is the biochemical precursor to glutathione, an antioxidant that functions as the primary free-radical scavenger in the brain. Years ago, it was shown that glutathione levels in the cerebral cortex and cerebrospinal fluid are markedly decreased in schizophrenia. Moreover, two genes in the glutathione pathway—glutathione S-transferase T1 and glutamate cysteine ligase modifier—have been identified as candidate schizophrenia-susceptibility genes, the psychiatrist said.

Dr. Berk conducted a formal double-blind clinical trial, sponsored by the Stanley Medical Research Institute. The study participants were 140 patients with schizophrenia of an average of 12 years' duration. They were randomized in a double-blind fashion to 1 g of NAC b.i.d. or placebo in addition to background therapy. They were a largely treatment-resistant group, with 40% on clozapine (Clozaril).

After 6 months, the NAC group showed significant reductions, compared with placebo, in the total and negative-subscale PANSS scores, the Clinical Global Impressions score, and the Global Assessment of Functioning score. The treatment-effect sizes were 0.43-0.57, which is considered a moderate clinical benefit.

At 6 months, 58% in the placebo arm had a Clinical Global Impressions score indicative of "no change or worse," a rate twice that in the NAC arm.

NAC had no effect on body weight or lab parameters. No side effect was more common in the NAC group, although Dr. Berk said that at dosages in the range of 6 g/day, mild nausea can be a problem.

"The beauty is that NAC is not new; it's in widespread use. It's widely available in health food shops. It has an established track record as a mucolytic and renal protective agent, and it has an excellent safety profile. You can get it for 10 bucks a month on the Internet," he noted.

In addition, two studies have shown efficacy for NAC in the treatment of compulsive gambling and cocaine and opiate abuse. ■

Lack of Awareness Differentiates Types of Nighttime Eating Disorders

MONTREAL — When night eating becomes pathological, with harmful effects on sleep and body weight, it is important to differentiate between sleep-related eating disorder and night-eating syndrome, said Dr. Jonathan Fleming, a psychiatrist at the University of British Columbia, Vancouver.

One key difference is that awareness of the awakenings and eating is seen in night-eating syndrome, but not in sleep-related eating disorder, he said at the annual conference of the Canadian Psychiatric Association. Another difference is that sleep-related eating disorder (SRED) is characterized by bizarre eating behavior, which can put the patient in danger.

"A recent patient of mine was found by his wife with the Christmas turkey, which was frozen, trying to carve it with a butter knife," Dr. Fleming said. "People eat very unusual things—like raw meat—that they would not normally eat in the daytime."

Night-eating syndrome (NES) is considered largely an affective illness, but sleep-related eating disorder tends to be associated with sleep disorders—making the treatment of these conditions quite different, he said. "The major thought is that NES may be a variant of affective illness with an admixture of a circadian disorder, whereas SRED is particularly associated with sleep apnea and periodic limb movement disorder," he said.

NES was first described in 1955, in patients seeking weight loss treatment. It occurs in about 1.5% of the population but is particularly prevalent in obese (6%-14%) and morbidly obese (42%) patients. It is characterized by evening hyperphagia, morning anorexia, initial insomnia, and awakenings throughout the night, with clear recall of being hungry and snacking.

There are no randomized controlled trials of treatments, but it is not surprising that case reports suggest chronobiotics (melatonin), antidepressants, appetite suppressants, and even light therapy have all been effective, he said.

In contrast, night eating is involuntary and largely unremembered in SRED, and morning anorexia is often characterized by nausea resulting from the unusual foods or toxic substances consumed overnight.

—Kate Johnson