Screen Helps Detect Global Developmental Delay

Child-development professionals advocate an in-depth process called developmental surveillance.

BY ROBERT FINN
San Francisco Bureau

BLAINE, WASH. — Pediatricians and family physicians need to be alert for the signs of global developmental delay in young children.

And when these signs are found they must be carefully followed up, Forrest C. Bennett, M.D., said at a conference sponsored by the North Pacific Pediatric Society.

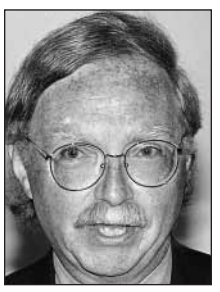
Global developmental delay (GDD) refers to a constellation of delays in several areas, including motor, language, and cognitive skills, as well as in socioemotional development. Many of these children also have diffuse hypotonia as well.

"You can't find GDD in the DSM, but it is a term that most developmentalists, neurologists, and geneticists use," said Dr. Bennett of the University of Washington (Seattle). "When you have low-tone kids and they present with development that's something like half their chronologic age in the first 3 years of life, that's a concerning presenting constellation."

By the time these children reach school age, the most common ultimate diagnosis will be mental retardation. A smaller number of children will be diagnosed with autism spectrum disorders or pervasive developmental disorder. An even smaller number of children are able to close the gap, emerging with specific learning disorders. The least common outcome is a child who overcomes the delay entirely, returning to the normal developmental track.

"Parents ask, 'Doctor, have you ever seen a child like this turn out just fine?' And I try to look at them honestly and say, 'It's possible [but] I don't see it a lot,' " Dr. Bennett said.

Pediatricians have typically screened for GDD at well-child visits by using parental questionnaires such as the PDQ (Prescreening Development Questionnaire) and ASQ (Ages & Stages Questionnaire), but some child-development professionals say that screening isn't enough. They advocate a more in-depth process called developmental surveillance.



"[Developmental surveillance] means asking the right questions at the right times, knowing that some milestones are more important than others," Dr. Bennett said. "It's really important to be sitting by 9 months, to have a pincer grasp by 12 months, to understand body parts at 18 months, …to put two words together at 2 years of age. In a busy office, some milestones are just more important and a little more relevant than others."

In addition, "You don't think developmentally just at the well-child visit. You see the family in the parking lot at the grocery store [and] you can whip a few developmental questions in there."

Developmental surveillance is not always practical, Dr. Bennett said. He admitted that he often forgets the milestones, even though he's raised three children of his own. And, in busy urban settings, it's not likely that physicians can count on running into their patients at the grocery store or anywhere else.

As a reminder to ask developmental questions, Dr. Bennett has placed a laminated poster on the wall of the exam room with developmental milestones based on the Denver II, an instrument intended to be used by professionals.

He also recommended having the parents complete the PDQ II, which consists of 10-12 age-appropriate questions and takes 4-5 minutes, or the ASQ, a 35-item questionnaire that takes 10-15 minutes. These can be mailed to the parents in advance of a well-child visit or handed to them in the waiting room. Many similar instruments exist, but most physicians use "homegrown" checklists, Dr. Bennett said.

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DR. BENNETT

This screening is just a first step if any red flags present themselves. "Screening does not make you a psychologist," Dr. Bennett said. "It should be just like when we find an abdominal mass unexpectedly. That triggers a whole bunch more questions, a much more careful physical exam, you probably order some laboratory [tests], and then perhaps you refer to subspecialists."

Assess the child's growth, health, vision, hearing, and medications in terms of their impact on development and behavior. Search for contributing factors to the problem by characterizing its nature, its timing, and whether it seems to be static or progressive.

Dr. Bennett finds that asking parents, "When did you first worry," yields some good information. "Unless they bring in the baby book, a lot of parents don't remember exactly when the child sat, crawled, pulled up, stood alone," he said. "But most parents in my experience are pretty good at remembering when they first got the sick feeling in their gut that something wasn't quite right about this kid."

For example, they may have noticed that in utero, the child didn't move as much as their other children; or in the nursery they may have had to wake the child to feed; or at 8 weeks of age, they couldn't get a responsive smile.

In most cases, the child's developmental delay will be static, but the physician should pay particularly close attention if it appears to be progressive. Children with GDD reach their milestones slowly, but they should not be losing any milestones. If they do, think about a missed phenylketonuria diagnosis or similar disorders.

During the physical exam, look closely for dysmorphic features. Most normal individuals will have three or four dysmorphologies, but children who have five or more may have a brain disorder.

Make sure also that the developmental delay isn't caused by a chronic organ-system problem, such as occult renal disease, and consider genetic causes as well.

Dr. Bennett recommended all children with developmental delay get a high-resolution banded karyotype, a DNA test for fragile X syndrome, and a urine metabolic screen.

An MRI may be indicated in some children, although these often come back with a nondescript finding such as "cerebral dysgenesis," he said.

And an EEG, while not routine, should be considered for any child in whom there is a high index of suspicion for atypical seizures. ■

Home Visits Fail to Identify Childhood Language Delays

BY MICHELE G. SULLIVAN
Mid-Atlantic Bureau

A home visit program designed to identify early childhood language delays not only failed to spot most delayed children, but also failed to refer the vast majority of identified children for further evaluation or intervention.

The results suggest the home visitors didn't get enough training to properly screen children and that the visitors lacked the skills to communicate concerns about developmental delays to parents, according to Tracy M. King, M.D., and colleagues (J. Dev. Behav. Pediatr. 2005;26:293-303).

"This study argues for prudence in the ongoing proliferation of home visiting programs and for caution in setting expectations regarding child development outcomes," said Dr. King of Johns Hopkins University School of Medicine, Baltimore, and her coinvestigators.

The researchers compared language delay identification rates for children enrolled in the Hawaii Healthy Start Program (304) with rates in a group of control children (209). All of the children were at high risk of developmental delay, child abuse, or neglect.

The Hawaii Healthy Start Program (HHSP) provides a regular home visitor, who teaches parents about child development, models good parental behavior, and links parents to a medical provider. The visitor also performs childhood developmental testing—including language testing—when the child is 3 years old. The control group did not receive any home visitation services.

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The home visitors identified only 24% of children with severe language delay. Parents and primary care providers in the HHSP group each identified 31% of such children, while parents in the control group identified almost twice as many (56%).

The fact that parents in the control group had an increased identification rate raises the concern that the home visitors actually interfered with identification. This could be because they lack sufficient training and are giving parents false reassurance of the child's language development.

Among children with any language delay, home visits identified 17%. Parents and primary care providers also did poorly in this group, identifying 26% and 24%, respectively. Parents in the control group identified 20% of children with any language delay and primary care providers, 25%.

Particularly concerning were the low referral rates after children were identified, the investigators said. Among the 72 children identified as having delays, only 2 were referred to their primary care provider, and none were referred to local early intervention programs.

Poor parental identification rates could be related to the high-risk communities in which the families lived, the investigators said. "It may be that language delays have become so prevalent in certain at-risk communities that it is no longer possible for parents to make accurate assessments of their child's development based on comparisons with the child's peers."

Poor home visitor and medical provider identification rates probably are due to inadequate training in child development, they said.

In an accompanying editorial, Shirley Russ, M.D., and Neal Halfon, M.D., said identification rates could be improved by using trained nurses as home visitors. Similar programs employing nurses have higher family retention rates and much better identification and referral rates (J. Dev. Behav. Pediatr. 2005;26:304-5).

"Professional nurses would be more likely to have knowledge of early childhood systems and resources in the community and would also have had more training in communicating about health and development issues to parents," said Dr. Russ and Dr. Halfon of the University of California, Los Angeles.

Dr. King and colleagues replied in a second commentary that unfortunately visiting nurse programs are costly and difficult to staff in areas such as Hawaii, which is experiencing a serious nursing shortage (J. Dev. Behav. Pediatr. 2005;26:307). ■