Reports of Pertussis Rising in Teenagers

BY MIRIAM E. TUCKER
Senior Writer

ATLANTA — Pertussis in adolescents is an increasingly reported problem across the United States, Margaret M. Cortese, M.D., said at a meeting of the Centers for Disease Control and Prevention’s Advisory Committee on Immunization Practices.

Preliminary data for 2004 include 8,000 cases reported in adolescents, with large numbers in Wisconsin, upstate New York, Colorado, and Massachusetts. More than 100 cases were reported in adolescents in each of 16 states, while 14 states reported more than 100 cases of all ages. Moreover, although reporting rates have increased, “these numbers are likely only a portion of the true burden,” said Dr. Cortese, a medical officer with the CDC’s National Immunization Program.

Her presentation was among the discussion points during a 4-hour session at the Advisory Committee for Immunization Practices (ACIP) meeting devoted to issues surrounding the pertussis disease burden and to the anticipated licensure of two new reduced-antigen tetanus-diphtheria-acellular pertussis (Tdap) vaccines, the University of Michigan and the CDC surveyed approximately 600 randomly selected U.S. pediatricians and family physicians. A total of 175 pediatricians and 145 family physicians returned the surveys and said they provided outpatient primary care to one or more adolescents (aged 11-18 years) per week.

Most of the physicians (75% of pediatricians and 66% of family physicians) worked in private, independent office settings, while 19% of the family physicians worked in practice networks/HMOs, compared with just 7% of the pediatricians.

Both specialties reported high rates of administering tetanus-diphtheria toxoids (Td) when indicated for wound management (73% pediatricians/83% family physicians) and for camp and/or school requirements (85%/79%). However, while 77% of pediatricians said they routinely gave Td vaccine to 11- to 12-year-olds at preventative care visits, just 51% of family physicians reported doing so.

Among the surveyed physicians, the reported “major” barriers to current adolescent Td vaccination included “lack of patient visits” for 40% of pediatricians and 48% of family physicians; “record keeping” for 11% and 24%, respectively; “reimbursement” for 3% and 17%; and “too busy” by 2% of pediatricians and 7% of family physicians. “No barrier” was reported by 47% of pediatricians and 32% of family physicians.

A total of 70% of pediatrics versus 42% of family physicians either agreed or strongly agreed with the statement that pertussis is a “serious enough disease” to use Tdap for adolescents, rather than Td, she noted.

In a separate survey of a different but comparable group of physicians, 63% of pediatricians and 35% of family physicians reported that more than half of their adolescent patients have a routine preventive visit at 11-12 years, while 44% of pediatrics and 27% of family physicians reported the same for those aged 14-15 years, compared with just 30% and 15%, respectively, at 17-18 years.

A total of 84% of pediatricians and 59% of family physicians said that more than half of their patients received a Td booster at any time between the ages of 11 and 18 years, suggesting more than 50% coverage. By comparison, the 2002 National Health Interview Survey found that just 33% of those aged 13-15 years had a Td dose listed in their shot cards, while coverage for Td varied from 49% to 97% in three states with Td school laws for middle-schoolers, Dr. Broder noted.

In addition to ACIP’s expected recommendation for routine Tdap vaccination at the 11- to 12-year-old preventive visit, the committee is also considering a “first opportunity” strategy in which the vaccine would be given to any teenager who had received Td more than 5 years earlier (an interval of 5 years is required to minimize adverse events). These survey data suggest that such a strategy “might pose challenges,” Dr. Broder remarked.

—Miriam E. Tucker

Criteria for PANDAS Subgroup Should Be Refined, Researchers Say

BY PATRICIE WENDLING
Chicago Bureau

CHICAGO — A new study suggests that three of the five criteria for inclusion in the pediatric autoimmune neuropsychiatric disorders associated with streptococcal infections, or PANDAS, subgroup could be narrowed and still provide clinically useful benchmarks.

The first criterion for this subgroup is that the children must meet a lifetime diagnostically consistent obsessive-compulsive disorder (OCD) or tic disorder, Lisa Snider, M.D., said at the annual meeting of the Society for Developmental and Behavioral Pediatrics.

“Some people are suggesting that anorexia nervosa, attention-deficit hyperactivity disorder, possibly even bipolar disorder could be triggered by infections like streptococcal infection,” Dr. Snider said. “Our research came out of a predisposition to think about OCD and tic are secondary to a dysfunction within the basal ganglia.”

“Our original research was on patients with Sydenham’s chorea, which is triggered by streptococcal infection, and felt to be a basal ganglia disorder.”

The criteria were defined in 1998 by colleague Susan Swedo, M.D., of the National Institute of Mental Health, Bethesda, Md., and have been used successfully to study the pathophysiology and clinical course of the PANDAS subgroup. But they also have been criticized as being too broad.

PANDAS is now defined by the presence of OCD and/or tic disorder, purpurial onset, unique clinical course, association of neuropsychiatric symptoms with streptococcal infections, and association with neurologic abnormalities during symptomatic periods.

Dr. Snider and her colleagues suggested the three new criteria should be:

▶ A primary diagnosis of OCD or prominent obsessive-compulsive features (criterion 1).
▶ Abrupt onset of neuropsychiatric symptoms reaching clinical impairment in less than 48 hours or a period of complete neuropsychiatric symptom remission (criterion 2).
▶ A positive throat culture in the 2 months prior to or elevated antistreptococcal titers drawn between 3 weeks and 3 months after neuropsychiatric symptom onset or exacerbation (criterion 3).

“The criteria haven’t radically changed, but they are tighter and much more specific, which should help clinicians and researchers in terms of consistent application,” Dr. Snider told the audience.

“If you see someone for the first time, you have a better chance now of saying if this is PANDAS or not, because we don’t have a blood test for this disorder.” The study included 58 boys and 20 girls, mean age 8.2 years, who met the original PANDAS criteria. Thirty-eight (76%) had primary OCD and 9 (17%) had primary tic disorder, 9 (17%) had comorbid OCD or significant obsessive-compulsive symptoms.

Of the 12 patients with a primary tic disorder, 9 (75%) had comorbid OCD or significant obsessive-compulsive symptoms.

Only three patients had a tic disorder without obsessive-compulsive features.

The results were equally clear in regard to criterion 2, Dr. Snider said. Forty-four of the 50 patients (88%) had an abrupt on-set of symptom-clinical impairment in less than 48 hours. Of the remaining six patients, four had at least one period of complete symptom remission.

“Only three patients had a tic disorder without obsessive-compulsive features.

The results were equally clear in regard to criterion 2, Dr. Snider said. Forty-four of the 50 patients (88%) had an abrupt on-set of symptom-clinical impairment in less than 48 hours. Of the remaining six patients, four had at least one period of complete symptom remission.

“If you see someone for the first time, you have a better chance now of saying if this is PANDAS or not, because we don’t have a blood test for this disorder.” The study included 58 boys and 20 girls, mean age 8.2 years, who met the original PANDAS criteria. Thirty-eight (76%) had primary OCD and 9 (17%) had primary tic disorder, 9 (17%) had comorbid OCD or significant obsessive-compulsive symptoms.

Of the 12 patients with a primary tic disorder, 9 (75%) had comorbid OCD or significant obsessive-compulsive symptoms.

Only three patients had a tic disorder without obsessive-compulsive features.

The results were equally clear in regard to criterion 2, Dr. Snider said. Forty-four of the 50 patients (88%) had an abrupt on-set of symptom-clinical impairment in less than 48 hours. Of the remaining six patients, four had at least one period of complete symptom remission.

“If you see someone for the first time, you have a better chance now of saying if this is PANDAS or not, because we don’t have a blood test for this disorder.” The study included 58 boys and 20 girls, mean age 8.2 years, who met the original PANDAS criteria. Thirty-eight (76%) had primary OCD and 9 (17%) had primary tic disorder, 9 (17%) had comorbid OCD or significant obsessive-compulsive symptoms.

Of the 12 patients with a primary tic disorder, 9 (75%) had comorbid OCD or significant obsessive-compulsive symptoms.

Only three patients had a tic disorder without obsessive-compulsive features.

The results were equally clear in regard to criterion 2, Dr. Snider said. Forty-four of the 50 patients (88%) had an abrupt on-set of symptom-clinical impairment in less than 48 hours. Of the remaining six patients, four had at least one period of complete symptom remission.