Type 2 Diabetes Overtakes Type 1 in Hispanic Girls

BY SHERRY BOSCHERT San Francisco Bureau

SAN FRANCISCO — From age 15 years onward, Hispanic females in the United States are significantly more likely to be diagnosed with incident type 2 diabetes than type 1 diabetes, according to an analysis of data from the Search for Diabetes in Youth study.

In addition, at ages 10-14 years, Hispanic females in the United States had twice the incidence of type 2 diabetes in 2002-2005, compared with Hispanic males. The study looked at youths less than 20 years old in populations from six states, Jean M. Lawrence and her associates reported at the annual scientific sessions of the American Diabetes Association.

During that period, 635 youths were diagnosed with diabetes out of a population of more than 3 million, with incidence rates peaking for females at ages 5-9 years and for males at ages 10-14 years, said Ms. Lawrence of Kaiser Permanente Southern California, in Pasadena. She had no conflicts of interest related to the study.

Incidence rates for type 1 diabetes in girls were 9/100,000 in ages 0-4 years, 20/100,000 in ages 5-9 years, 16/100,000 in ages 10-14 years, and 7/100,000 in ages 15-19 years. For boys, incidence rates for type 1 diabetes were 11/100,000 in ages 0-4 years, 16/100,000 in ages 5-9 years, 20/100,000 in ages 10-14 years, and 9/100,000 in ages 15-19 years.

Type 2 diabetes rarely was diagnosed in children less than 10 years old. For ages 10-14 years, the incidence of type 2 diabetes was 15/100,000 for girls and 7/100,000 for boys. For ages 15-19 years, the incidence was 13/100,000 for girls and 11/100,000 for boys.

The study identified prevalent



diabetes in the year 2001 in 781 out of more than 641,000 Hispanic youths—most of it type 1 rather than type 2. Prevalence rates did not differ significantly

by sex in any of the age groups. The prevalence increased with age for both diabetes types in

both sexes. In individuals ages 15-17 years, the prevalence of type 1 diabetes was 1.6/1,000 for girls and 1.8/1,000 for boys, and the prevalence of type 2 diabetes was 0.8/1,000 for girls and 0.6/1,000for boys, Ms. Lawrence said.

Data from two additional studies presented in the same session at the meeting showed steep increases in the incidence and prevalence of diabetes in Canadians and a faster than predicted rise in type 1 diabetes in Finland, the world's hot spot for the disease.

In the Canadian study, data on diabetes in all residents younger than 20 years of age in the province of Alberta found 2,301 prevalent cases among 840,000 children and adolescents, for a rate of 28/10,000. Approximately 80% of cases were in 10- to 19year-olds, Jeffrey A. Johnson, Ph.D., of the University of Alberta, Edmonton, and his associates reported. He had no conflicts of interest in this study. ■

AAP Recommends Lipid Screening, Treatment in Children

Source: Ms. Lawrence

BY MARY ELLEN SCHNEIDER New York Bureau

Citing new information on obesity, poor diet, and lack of exercise, the American Academy of Pediatrics has called on its members to become more aggressive in screening children for dyslipidemia.

AAP now recommends that children aged 2-10 years should be screened if they have a family history of dyslipidemia or premature cardiovascular disease.

Screening is also advised in children with an unknown family history or who have other risk factors for cardiovascular disease within their families such as overweight/obesity, hypertension, smoking, or diabetes mellitus.

Children whose results are within the normal reference range should be retested in 3-5 years, according to AAP's Committee on Nutrition, which developed the new recommendations.

The statement replaces the organization's 1998 guidelines on managing cholesterol in childhood, which have become "outdated" in light of new research, according to AAP.

The organization also issued targeted treatment recommendations in its new statement, which were published in the journal Pediatrics (2008;122:198-208).

The organization advised that weight management, including nutritional counseling and increased physical activity, should be the "primary treatment" approach for children and adolescents who are overweight or obese and have either a high triglyceride concentration or a low HDL cholesterol concentration, the policy statement said.

However, drug therapy should be considered for children aged 8 years and older with an LDL cholesterol concentration of 190 mg/dL or greater. Pharmacological treatment should also be explored for children with an LDL cholesterol concentration of 160 mg/dL or greater with a family history of early heart disease, or two or more additional risk factors for cardiovascular disease, or an LDL cholesterol concentration of 130 mg/dL or greater plus diabetes mellitus.

Given autopsy studies demonstrating that the atherosclerotic process begins in childhood and more data showing the safety and effectiveness of drug therapies, members of AAP's Committee on Nutrition wanted to offer physicians more options for treating children with high LDL cholesterol concentrations, said Dr. Marcie Beth Schneider, a member of the Committee on Nutrition and an adolescent medicine specialist in Greenwich, Conn.

No one wants to short-circuit the use of diet and exercise interventions, she said, but drugs might be an appropriate addition for some patients when lifestyle changes do not yield results over time. "This is an adjunctive therapy," she said.

The new AAP statement provides a review of the available pharmacologic treatments including bile acid-binding resins, niacin, statins, cholesterol-absorption inhibitors, and fibrates. The AAP statement notes that niacin should not be used routinely in the treatment of pediatric dyslipidemia because of adverse effects such as flushing, hepatic failure, myopathy, glucose intolerance, and hyperuricemia.

The new recommendations from AAP are "moderate and balanced," said Dr. Roberta Williams, chair of the department of pediatrics at the University of Southern California, Los Angeles. "It is important to stress that any pharmacologic intervention be preceded by vigorous nonpharmacologic strategies," she said. "It is unlikely that lowering LDL and triglycerides to mildly elevated levels will produce negative consequences, but it will be critical to monitor patients as directed in the guidelines and not try to lower levels more than recommended because of potential consequences for growth and development."

Dr. Antonio Gotto, a lipid expert and dean of the Weill Cornell Medical College, New York, agreed that the AAP recommendations are a reasonable approach to the management of dyslipidemia in children.

For those children and adolescents who require treatment, pediatricians have good options in either the statins or the cholesterol absorption inhibitor ezetimibe, he said. While there are not long-term data on statin use in children, such use has been shown to be both safe and effective. But ezetimibe offers a safe alternative without the systemic effects of statins, said Dr. Gotto, who consults for Merck & Co., which markets simvastatin (Zocor) and ezetimibe (Zetia).

If followed, Dr. Gotto said the AAP recommendations could make a real difference in preventing dyslipidemia and cardiovascular disease. "The evidence we have is that starting earlier makes a big difference," he said.

Dr. Sarah Clauss said that, while appropriate medical practice, the guidelines aren't a major departure from previous statements from the AAP and other organizations. The recommendations underscore the need to recognize risk factors other than inherited cholesterol such as overweight, obesity, and diabetes. They also highlight the need not to wait to screen children for dyslipidemia. Waiting until after age 10 to screen can produce inaccurate results since most adolescents experience a natural decrease in LDL concentrations during puberty, said Dr. Clauss, a pediatric cardiologist at Children's National Medical Center in Washington.

Dr. Clauss also supported AAP's advice on targeting medication treatment to children with elevated LDL cholesterol concentrations after diet and lifestyle modifications were attempted. "I hope people aren't getting the message that we'll be starting more and more children on medications," she said.

But Dr. Lawrence D. Rosen, a pediatrician in Oradell, N.J., and vice chair of AAP's section on complementary and integrative medicine, objected to the focus on medication in the new recommendations.

While there is a lot of good information in the paper, he said, he is concerned that there is not enough research to warrant publicly advocating for the use of pharmacological therapy in children. The better approach would have been a strong message about the problem of obesity and metabolic syndrome and a call for greater research into preventive approaches, Dr. Rosen said.

The AAP statement also outlines an updated population approach to preventing cardiovascular disease. For example, the organization recommends following the government-issued Dietary Guidelines for Americans, including using low-fat dairy products, in children as young as 2 years. Reduced-fat milk can also be used in children between 1 and 2 years of age if they have a family history of obesity, dyslipidemia, or cardiovascular disease, or overweight/obesity is a concern.

In an effort to address concerns about conflicts of interest, AAP policy requires that all of its committee members sign conflict of interest disclosure forms and declare any potential conflicts related to the committee's charge at each meeting. Members are asked to voluntarily recuse themselves if a potential conflict exists. The process is supervised by committee oversight bodies, according to AAP.