CDC Identifies Regional Patterns of Obesity, Diabetes

BY MARKETTE SMITH

Counties with the highest rates of obesity and diabetes are disproportionately located in the Southeast and western Appalachian regions of the United States, according to a survey from the Centers for Disease Control and Prevention.

Over 80% of counties in the Appalachian regions of Kentucky, Tennessee, and West Virginia reported high rates of obesity and diabetes, while three-fourths of counties in Alabama, Georgia, Louisiana, Mississippi, and South Carolina reported similarly high rates, according to the CDC.

"Isolated counties, including tribal lands in the western United States, also had high prevalence of diabetes and obesity," the researchers wrote (MMWR 2009;58:1259-63).

The results came from a self-reported telephone survey conducted in all 3,141 U.S. counties in 2007. Obesity was defined as a body mass index of 30 kg/m^2 or higher.

The 10.6% or higher prevalence of diabetes—the top quintile of survey results—existed primarily in the belt extending from the Mississippi River to the coastal Carolinas and in the Appalachians. In Alabama, Kentucky, Mississippi, South Carolina, and West Virginia, 73% of counties had diabetes rates in the top quintile, and 70% of counties had obesity rates in the top quintile.

On a county level, the prevalence of obesity was highly correlated with the prevalence of diabetes. For example, a county with an obesity rate five percentage points higher than another county also had a diabetes rate that was at least 1.4 percentage points higher.

The counties in the top quintile of diabetes prevalence were located primarily in a belt extending from the Mississippi River to the coastal Carolinas and in the Appalachians.

The strong regional patterns of obesity and diabetes are believed to exist because of a convergence of social norms, community and environmental factors, socioeconomic status, and genetic risk factors, according to researchers. Evidence suggests that successful interventions, particularly for diabetes prevention and control, often depend on efficient referral to local community programs (Am. J. Prev. Med. 2008;35:357-63).

As medical costs associated with obesity reached an estimated $147 billion in 2008 and diabetes costs reached $116 billion, researchers hope the results will help target prevention and intervention efforts to the high-risk regions found in the survey.

"Diabetes is costly in human and economic terms, and it's urgent that we take action to prevent and control this serious disease," Dr. Ann Albright, director of the CDC's Division of Diabetes Translation, said in a written statement. "The study shows strong regional patterns of diabetes and can help focus prevention efforts where they are most needed."

The researchers concluded that comprehensive disease surveillance systems are necessary for developing preventive health policies and tracking their impact in high-risk populations.

The report is available at www.cdc.gov/mmwr/preview/mmwrhtml/mm5845a2.htm. ■

Follow-Ups Beneficial After Gastric Banding

BY HEIDI SPLETE

WASHINGTON — Successful weight loss for patients who undergo gastric banding is significantly associated with the number of follow-up visits to a surgeon's office during the first year after the procedure, according to a study involving 113 adults who had gastric banding surgery between 2005 and 2007.

Gastric band surgery can be a safe and effective strategy for weight loss, but studies have shown that the percentage of excess weight lost after the procedure ranges from –8.5% to 79% after 1 year, said Dr. Julio Teixeira of St. Luke's Roosevelt Hospital in New York.

To identify predictors of weight loss 1 year after gastric band surgery, researchers reviewed baseline demographics, body mass index, comorbidities, number of office visits, and gastric band adjustments for up to 15 months after the procedure. The single-center findings were presented in a poster at the annual meeting of the Obesity Society.

The patients ranged in age from 22 to 71 years, with an average age of 41 years. The patients' body mass indexes ranged from 36 kg/m^2 to 72 kg/m^2, with an average of 47 kg/m^2. Approximately 91% of the patients were women; 32% were white, 43% were black, and 25% were Hispanic.

After 1 year, the average total weight loss was 16 kg, and the percentage of weight lost was 24%. Participants had an average of six follow-up visits to a surgeon's office during the first year after the procedure. There was a significant correlation between the number of follow-up visits and both the amount of weight lost and the percentage of excess weight lost.

The number of adjustments to the band during the first year was not predictive of weight loss, according to the researchers. Patient age also had no apparent effect on weight loss, nor did comorbidities including type 2 diabetes, hypertension, obstructive sleep apnea, and asthma.

"Prospective trials are needed to define strategies to improve weight loss outcomes after gastric banding," the investigators concluded.

Dr. Teixeira has served as an adviser to Allergan, which manufactures an adjustable gastric banding system. ■

Preliminary Data: More Cardiac Events With Sibutramine

BY ELIZABETH MECHCATIE

As part of an ongoing safety review of the weight-loss drug sibutramine, the Food and Drug Administration is looking at recent data suggesting that the cardiovascular event rate among patients on the medication was higher than among those on placebo.

"The analysis of these data is ongoing and FDA is making no conclusions about the preliminary findings at this time," according to a statement posted on the agency's MedWatch site. These findings, the statement adds, "highlight the importance of avoiding the use of sibutramine" in patients with a history of coronary artery disease, congestive heart failure, arrhythmias, or stroke, which is recommended in the current sibutramine label.

Sibutramine is an orally administered drug marketed as Meridia by Abbott Laboratories. Its therapeutic effects result from norepinephrine, serotonin, and dopamine reuptake inhibition, according to the label. It was approved in 1997 for the management of obesity, including weight loss and maintenance of weight loss, in conjunction with a reduced-calorie diet, and is recommended only for obese patients with an initial body mass index at or above 30 kg/m^2 or a BMI at or above 27 kg/m^2 in patients with other risk factors such as diabetes, hypercholesterolemia, or controlled hypertension.

The FDA reported results from a study of about 10,000 patients aged 55 years or older who were overweight or obese and had a history of heart disease or type 2 diabetes and one additional cardiovascular risk factor. The preliminary results of the study's primary end point—MI, stroke, resuscitated cardiac arrest, or death—were reported in 11.4% of those on sibutramine, compared with 10% of those on placebo. The difference was described in the FDA statement as "higher than expected, suggesting that sibutramine is associated with an increased cardiovascular risk in the study population."

The early results of the study's primary end point—MI, stroke, resuscitated cardiac arrest, or death—were reported in 11.4% of those on sibutramine and 10% of those on placebo.

Abbott started the study, Sibutramine Cardiovascular Morbidity/Mortality Outcomes in Overweight or Obese Subjects at Risk of a Cardiovascular Event (SCOUT), in 2002 at the request of the FDA's European counterpart, the European Medicines Agency (EMEA), as one of the conditions for keeping the drug on the market in Europe after serious cardiovascular events were reported in people on sibutramine in the early 2000s. The aim of the study was to evaluate the safety and efficacy of sibutramine in overweight and obese people.

The FDA was apprised of the results in mid-November.

The Health Research Group of health advocacy organization Public Citizen filed a citizen's petition with the FDA early this month, calling on the agency to withdraw the drug from the market immediately, because of the new data indicating that the drug increases the risk of MIs, strokes, resuscitated cardiac arrest, or deaths in obese patients treated with the drug.

This is the second such petition filed by the group. In 2005, the FDA denied the first petition requesting that sibutramine be taken off the market because of concerns over the drug's safety, related to the increased heart rate and/or blood pressure seen in some patients in preapproval clinical studies.

In an interview, Dr. Sidney Wolfe, director of the Washington-based Health Research Group, said that the preliminary results of the SCOUT trial are a concern. The advocacy group continues to support the withdrawal of sibutramine from the market and is currently conducting an analysis of sibutramine-related reports in the FDA's adverse event reporting system database, he said.

Despite the label's recommendation that patients with risk factors such as cardiovascular disease not be treated with sibutramine, the drug is still prescribed to patients who are obese and have some of these risk factors, he noted. ■

Clinicians can report adverse events associated with sibutramine to the FDA's MedWatch program at 800-332-1088 or www.accessdata.fda.gov/scripts/medwatch/medwatch-online.htm.