Obstructive Sleep Apnea Ups Death After Stroke

BY DOUG BRUNK

SAN DIEGO — The presence of obstructive sleep apnea independently increases the risk of death after acute ischemic stroke, results from a single-center study showed.

The finding underscores the importance of screening for obstructive sleep apnea (OSA) as a risk factor for the development of stroke, since effective treatment for the condition is available, researchers led by Dr. Meghna P. Mansukhani reported during a poster session at the International Stroke Conference.

The finding also confirms results of a 10-year-long Swedish study that demonstrated an increase in mortality in stroke patients diagnosed with OSA after the stroke by polysomnography (Arch. Intern. Med. 2008;168:297-301).

Dr. Mansukhani and colleagues at the Mayo Clinic, Rochester, Minn., studied 174 consecutive patients who presented with acute ischemic stroke during June 2007–March 2008. The patients completed the Berlin Sleep Questionnaire, a screening test for OSA in the primary care setting. The mean age of the patients was 72 years, and 55% were female.

A total of 105 patients (61%) had a high risk of sleep apnea. Of these, seven had a previous diagnosis of OSA.

Of the 174 patients studied, 11 died (6%). Those who had a previous diagnosis of OSA were 5 times more likely to die within the first month following the stroke, compared with those who did not have a diagnosis of OSA, according to the presentation at a conference sponsored by the American Heart Association.

Dr. Mansukhani said she had no conflicts to disclose. ∎

Weight Loss Improved Mild Apnea in Adults

Weight loss significantly improved mild obstructive sleep apnea, according to results of a study of overweight adults.

Obesity is a risk factor for obstructive sleep apnea (OSA), but no randomized trials have addressed whether weight reduction improves the condition, noted Dr. Henri P.I. Tuomilehto of the University of Kuopio (Finland), and colleagues.

In the study, they randomized 72 overweight adults with mild OSA to a program that included a very-low-calorie diet and supervised lifestyle modification, or to lifestyle counseling.

The intervention included instructions for a very-low-calorie diet and 14 visits with a nutritionist during a 1-year period (including face-to-face meetings and group sessions), as well as recommendations for increasing physical activity. No specific exercise program was included in the intervention.

Improvements in OSA were objectively measured using the apnea-hypopnea index (AHI), and subjectively measured using a quality of life scale and patient reports of symptom changes. All participants had a body mass index between 28 and 40 kg/m^2 and an AHI of 5-15 events per hour when they entered the study. Demographic characteristics were similar between the two groups.

At 1-year, the intervention group achieved significantly greater weight loss on average, compared with the controls (11 kg vs. 2 kg). The average total AHI in the intervention group was 6 events per hour, which was significantly less than the average of 9.6 events per hour in the control group (Am. J. Respir. Crit. Care Med. 2009;179:320-7).

A 5-kg weight loss from baseline body weight was associated with a 2.0-unit reduction in AHI, and a 5-cm reduction in waist circumference was associated with a 2.5-unit reduction in AHI.

"Significant improvements were also found in symptoms related to OSA, insulin resistance, lipids, and cardiorespiratory variable, such as arterial oxygen saturation, in patients belonging to the intervention group," they wrote.

The researchers had no financial conflicts to disclose.

—Heidi Splete