

Good Night's Sleep May Have Role in Staying Slim

BY ILYA PETROU, M.D.
Contributing Writer

GENEVA — A good night's sleep of 7-8 hours may be a key factor in staying slim, and any deviations from this ideal could cause weight gain, results of a 6-year prospective study suggest.

Of 276 adults who participated in the study, 31% had a weight gain of at least 5 kg during the follow-up period. Short-duration (5-6 hours) and long-duration (9-10 hours) sleepers were 35% and 25% more likely, respectively, to have a 5-kg weight gain, compared with those who slept for 7-8 hours.

"Both shorter and longer sleep duration times can predict higher body weight and fat gain in adults, independent of baseline weight or other covariates," Jean-Philippe Chaput of Laval University, Quebec City, said at the 16th Eu-

ropean Congress on Obesity. Sleep duration should be added to the list of determinants that contribute to weight gain and obesity, he noted.

The investigators evaluated the relationship between sleep duration and subsequent body weight and fat gain in the participants, who were aged 21-64 years. Changes in adiposity indices, including body mass index, waist circumference, percent body fat, and fat mass, were compared.

The risk of developing obesity was elevated for short- and long-duration sleepers, compared with average-duration sleepers, with a 27% and 21% increase in risk, respectively. The data were adjusted for covariates including resting metabolic rate, physical activity, and smoking habits.

Compared with those in the normal-duration sleep group, short and long sleepers had greater increases in waist circumference (58% and 47% more, respectively) and greater weight gain (1.8 kg and 1.5 kg, respectively).

According to Mr. Chaput, the most plausible explanation for the sleep and body weight association is an alteration of hormones, such as leptin and ghrelin. Short sleepers are characterized by low leptin levels and high ghrelin levels, suggesting that a positive caloric balance might occur which could lead to weight gain over time.

The researchers previously investigated the effect of sleep duration on weight in children, finding that short sleep duration increases the risk of overweight and obesity in this population as well.

"Furthermore, short sleep duration favors abdominal adiposity rather than total adiposity in children. This suggests the impact of short sleep duration might be more deleterious than previously thought," Mr. Chaput said, adding that short sleep duration was the most important risk factor for obesity or overweight in children, followed by parental obesity, watching TV, and physical inactivity. ■

Psychosocial Barriers Hinder Quest for Weight-Loss Therapy

BY SUSAN LONDON
Contributing Writer

SEATTLE — Money and time are the leading barriers to seeking weight-loss treatment among overweight and obese adults. But stigma and a belief that one is too heavy for treatment become more influential barriers the heavier a person is.

Little is known from the literature about patterns of treatment seeking for obesity over time, and little is known about barriers that might prevent treatment seeking from taking place, Anna C. Ciao, a graduate student at the University of Hawaii, Honolulu, said at an international conference sponsored by the Academy for Eating Disorders.

Ms. Ciao was reporting on an anonymous online survey offered to overweight or obese men and women aged 18 years or older in which the participants were asked about seven treatments of increasing intensity (based on level of professional involvement): treatment on one's own by taking steps such as reducing caloric intake, reading self-help books, using self-help online programs, turning to commercial programs such as Weight Watchers, seeking help from professionals other than medical doctors such as nutritionists and psychotherapists, turning to medical doctors, and having weight-loss surgery.

They were also asked about five barriers to seeking treatment: money, time, stigma, shame, and a belief that one is too heavy for the treatment.

Of the 154 respondents, 76% were white, 16% were black, 2% were Hispanic, and the rest were of other or mixed ethnicities, and 86% were women, Ms. Ciao said at the conference, cosponsored by the University of New Mexico. Their mean age was 30 years (range was 18-67 years), and their mean body mass index (BMI) was 33 kg/m² (range was 25-80); 41% were overweight, and 59% were obese.

Among the seven treatments, treatment on one's own was the most commonly sought, desired, and planned. Overall, 77% of respondents had sought this treatment; 36% desired it but had no current plans, and

51% planned to pursue it in the future. In contrast, surgery was the least commonly sought, desired, and planned treatment; 8% of respondents had sought surgery, 18% desired it, and 8% planned to have it.

"Despite these high levels of endorsement of treatment seeking, a substantial number of people did not say yes to seeking any kind of treatment," Ms. Ciao said, noting that 11% had not sought any of the treatments, 28% did not desire any, and 25% had no plans for any.

Of the five barriers to treatment, the most commonly cited overall was money and the second was not having enough time. Most respondents reported no barriers to three less-intensive treatments: treatment on one's own, self-help online programs, and self-help books.

With the exception of surgery, the mean number of barriers cited for a treatment increased with intensity, ranging from 0.8 barriers for treatment on one's own to 1.3 barriers for medical doctors. The mean number for surgery was 0.5. Ms. Ciao said surgery might have been an outlier because individuals must qualify for this treatment, so they might have perceived the barriers as irrelevant.

BMI was correlated with the total number of treatments sought but not with the number desired or planned.

"Heavier people sought a greater number of treatments in the past but didn't necessarily plan to seek or desire to seek more treatments in the future," a disconnect that might suggest "some discouragement from the failed weight-loss attempt," she said.

BMI also was correlated with the total number of barriers across treatments, indicating that heavier people perceive more barriers to treatment, she said. BMI was also correlated with stigma and being too heavy for treatment individually. "This is consistent with the literature that suggests that individuals are afraid of stigmatization, especially from professionals," Ms. Ciao said. "Feeling too heavy may reflect an anticipated failure or expectation that weight-loss treatment may not work for them."

Ms. Ciao reported she had no conflicts of interest in association with the study. ■

Taranabant Aids Weight Loss, Enhances Metabolic Parameters

BY ILYA PETROU, M.D.
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GENEVA — Overweight and obese patients achieved significant weight loss and improved metabolic parameters using taranabant, according to interim results from a 2-year study.

Taranabant is a structurally distinct, highly selective cannabinoid-1 (CB-1) receptor inverse agonist under investigation for the treatment of obesity.

"With diet and exercise, treatment with taranabant 2 mg for 52 weeks was generally well tolerated and led to clinically meaningful weight loss in obese and overweight patients,"



said Dr. Joe Proietto of the University of Melbourne, who presented the results at the 16th European Congress on Obesity. "Relative to taranabant dosed at 2 mg, the 4-mg and 6-mg doses were associated with slightly more weight loss, but at an increased incidence of adverse events."

In a previous phase II study with taranabant dosed at 0.5, 2, 4, or 6 mg/day, a dose-dependent and clinically meaningful weight loss was seen in obese patients at 12 weeks, compared with placebo. This current ongoing 2-year phase III study was designed to evaluate the long-term efficacy and safety taranabant in overweight and obese patients. End points included changes in body weight, waist circumference, and serum lipids, and the proportion of subjects with metabolic syndrome.

After a 2-week single-blind placebo and diet run-in period, 2,502 overweight (body mass index greater than 25 kg/m² but less than 30 kg/m²) and obese (BMI greater than 30 kg/m²) patients were randomized to receive either placebo or taranabant 2 mg, 4 mg, or 6 mg for 52 weeks. Based on a minimal increase in efficacy at doses greater than 4 mg and a trend toward higher adverse events at 1

year, patients on the 6-mg dose were rerandomized to 2 mg or placebo, and the 6-mg group was not analyzed.

The researchers found that the least-squares mean changes from baseline in body weight were -2.6 kg, -6.6 kg, and -8.1 kg in patients receiving placebo, taranabant 2 mg, and taranabant 4 mg, respectively.

Compared with placebo, taranabant dosed at 2 and 4 mg showed significant improvement in waist circumference (-3.1%, -7.0%, and -7.5%, respectively)

and a positive impact in changes in HDL cholesterol (7.0%, 13.2%, and 14.1%, respectively), triglycerides (4.0%, -3.1%, and -6.2%, respectively), and the proportion of patients with

metabolic syndrome (47.3%, 36.0%, and 30.7%, respectively).

There were no significant changes seen in glucose metabolism—including fasting glucose, fasting insulin, or the quantitative insulin sensitivity check index measure of insulin sensitivity—or in blood pressure when compared with placebo.

After a year of diet and exercise, patients randomized to placebo showed a slight increase in triglycerides, for which Dr. Proietto had no conclusive explanation. Other studies also have shown slightly increased triglycerides, which tend to be fairly labile and can fluctuate in patients, according to Dr. Proietto.

Adverse events included gastrointestinal-related events in 28.5% of the placebo group and in 41.8% and 46.7% of the taranabant 2-mg and 4-mg groups, respectively. Psychiatric adverse events occurred in 20.4% of the placebo group and 28.3% and 40.2% of the taranabant 2-mg and 4-mg groups, respectively.

Dr. Proietto disclosed that he is a member of an advisory board for Merck & Co., which is developing taranabant. His institution participated in the current trial. ■

There was slightly more weight loss with higher doses of taranabant, but at an increased incidence of adverse events.

DR. PROIETTO