Study Elucidates Menopause-Related Sleep Issues

BY HEIDI SPLETE
Senior Writer

MINNEAPOLIS — Women with no history of sleep disorders often report sleep problems—especially difficulty falling asleep—as they undergo menopause. Their complaints were validated by a sleep study of more than 700 women presented at the annual meeting of the Associated Professional Sleep Societies.

"These data provide, for the first time, objective findings to support this common sleep complaint in postmenopausal women," asserted Edward O. Bixler, Ph.D., who is vice chair of the sleep research division at Pennsylvania State University in Hershey.

To confirm the association between menopause and poor sleep and to seek a possible mechanism for this connection, Dr. Bixler and his colleagues conducted single-night polysomnographies on 715 women with a mean age of 49 years. Of these, 400 women were premenopausal, 120 were postmenopausal and using hormone therapy (HT), and 195 were postmenopausal but not using HT.

Women sleep as well as or better than men until they reach menopause, but sleep needs change with age, Dr. Bixler noted.

With this fact in mind, the researchers used a group of 609 men who were at least 45 years old (with an average age of 49 years) as controls for the study. The average body mass index for both genders was 26.9 kg/m^2. All of the study participants had a low score (less than 5) on the apnea-hypopnea index and did not complain of insomnia or excessive daytime sleepiness.

The results of the single-night sleep test showed that the postmenopausal women who were not on hormone therapy took an average of 15 minutes longer to fall asleep, compared with women who were on HT, and an average of 10

continued

minutes longer to fall asleep compared with the men. These differences were statistically significant.

The average time it took for the male controls to fall asleep was not significantly different from that of premenopausal women (a difference of 1.6 minutes) or of postmenopausal women who were taking hormone therapy (a difference of 5.6 minutes).

"What was unexpected was that we didn't find an increase in daytime sleepiness," Dr. Bixler noted. He proposed that the lack of daytime sleepiness might be a result of the reduced need for sleep that is a natural part of aging. "As you age, you are less likely to be sleepy during the day even though you are sleeping less at night," he said.

When the researchers looked at slow wave sleep, which is associated with the brain's ability to recharge, think, and remember, they found no differences between premenopausal women and male controls.

Postmenopausal women who didn't use HT, however, were twice as likely to have slow wave sleep as were male controls, and postmenopausal women who used HT were four times as likely to have slow wave sleep as were male controls. Therefore, postmenopausal women who used HT were twice as likely to have slow wave sleep as were women who didn't use HT.

The data suggest that sleep latency is a valid symptom among menopausal women without a history of sleep disorders, especially among those who are not using HT. Based on these findings, menopausal women may be at increased risk for developing chronic insomnia that may require treatment, Dr. Bixler added.

"We would speculate that [menopausal changes] may be triggers for the onset of primary insomnia in vulnerable women," he said. ■

Depression Affects Heart Rate Variability

BY MARY ANN MOON
Contributing Writer

Depression severely impairs the recovery of heart rate variability after acute coronary syndrome, reported Dr. Alexander H. Glassman of Columbia University, New York, and his associates.

In addition, heart rate variability (HRV) continues to decline in patients whose depression does not respond to sertraline (Zoloft), while it ceases to decline in those who do respond to sertraline. It is not yet known whether this cardiac benefit is attributable to a pharmacologic effect of the antidepressant, to improvement of the depressive illness, or to a combination of both, the researchers said.

"What is clear is that depression is associated with biological changes involving increased heart rate, inflammatory response, plasma norepinephrine, platelet reactivity, decreased heart rate variability, and now, absent post–ACS-HRV recovery, all of which [are] associated with life-threatening consequences," said Dr. Glassman and his associates.

"From a clinician's point of view, patients with depression after myocardial infarction . . . should be both carefully watched and aggressively treated, because they are at an elevated cardiac risk and less likely to get better spontaneously," they noted (Arch. Gen. Psychiatry 2007;64:1025-31).

The researchers used data from 258 subjects who participated in the SADHART study to examine the effects of depression and of antidepressant therapy on heart rate variability. SADHART (Sertraline Antidepressant Heart Attack Randomized Trial), which took place in 1997-2001, compared sertraline with placebo in patients with major depressive disorder who were hospitalized after ACS.

In the general population, HRV falls abruptly during acute coronary episodes and recovers gradually but incompletely in the following weeks. However, Dr. Glassman and his associates found that HRV failed to recover in ACS patients with major depression.

The decline in HRV leveled off or improved slightly in those who responded to sertraline and in those whose mood improved spontaneously, but continued to decline in patients who received placebo or who failed to respond to sertraline, the investigators said.

Even patients who responded to sertraline showed only one-third as much HRV recovery as is reported in the literature among ACS patients who do not have depression. Thus, even successful selective serotonin reuptake inhibitor therapy "may not fully eliminate the autonomic risk associated with major depressive disorder," the investigators added.

Dr. Glassman served as a member of the steering committee for SADHART. He also has been a consultant for and has received honoraria from Pfizer Inc., which markets sertraline and provided partial support for the study. ■