Medical Xpress

Journal Sleep: Longer CPAP use at night can normalize one's daytime functioning

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WESTCHESTER, Ill. – A study published in the June 1st issue of the journal SLEEP finds that longer nightly duration of continuous positive airway pressure (CPAP) use can help those suffering from obstructive sleep apnea (OSA) achieve normal daytime functioning.

The study, conducted by Terri E. Weaver, PhD, of the University of Pennsylvania, focused on 149 patients with severe OSA at seven sleep centers in the United States and Canada. Before treatment and again after three months of CPAP, the participants completed a day of testing that included measures of daytime sleepiness and functional status.

The findings indicated that a greater percentage of participants impaired prior to the initiation of CPAP achieved decreased daytime sleepiness and enhanced functioning to normal levels with longer nightly CPAP durations.

Dr. Weaver identified a couple of important clinical measures from this study.

"From a population sense, functions for predicted probabilities of normalization show that more CPAP use is associated with greater relief of sleepiness, no matter how it's measured," said Weaver.

According to Dr. Weaver, there are also patients who normalize on therapy with somewhat limited CPAP use.

"The actual need for CPAP in terms of reversing sleepiness is likely to be individually determined," said Weaver. "We cannot assume that an individual using CPAP only four hours per night is inadequately treated for sleepiness outcomes. We also cannot assume that the patient is effectively treated. Therefore, it is important to evaluate treatment effectiveness by assessing the level of adherence in conjunction with treatment outcomes."

Dr. Weaver noted that there are, in contrast, individuals who remain excessively sleepy despite more than seven hours of CPAP use per night. The determination of a recommended nightly duration of CPAP use is also dependent on which outcome is viewed as the most reflective of clinical improvement, added Weaver.

OSA, a sleep related breathing disorder that causes your body to stop breathing during sleep, occurs when the tissue in the back of the throat collapses and blocks the airway, which prevents air from getting into the lungs.

Effects of OSA include cardiovascular disease, an increased risk of hypertension, stroke and diabetes. Other effects include daytime sleepiness, alertness and concentration deficiencies.

OSA can occur in men and women of any age, but it is most common in obese, middle-aged men. The AASM estimates that four percent of men and two percent of women have OSA, and millions more remain undiagnosed.

Safe and effective treatments are available for those with OSA. Scientific evidence shows that continuous positive airway pressure (CPAP) is the best treatment for OSA. CPAP provides a steady stream of pressurized air to patients through a mask that they wear during sleep. This airflow keeps the airway open, preventing the pauses in breathing

that characterize sleep apnea and restoring normal oxygen levels.

Source: American Academy of Sleep Medicine

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