

Sleep apnea-stroke connection just as high in women as in men

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The link between stroke and obstructive sleep apnea (OSA) has been established by several clinical studies in recent years, with the most significant risks attributed to male patients. Now, a new study by researchers from Boston says the link between OSA and stroke may be just as strong among women.

According to the study, because men tend to develop OSA earlier than [women](#), studies that have evaluated the link between OSA and [stroke](#) among age-matched groups of men and women may have underestimated associations.

"Some researchers and clinicians have theorized that because men may have OSA for longer periods of their lives compared to women, studies have been looking at populations with very different exposure times, and that therefore, the gender differences that have been apparent in past studies really just reflect inadequate follow-up time," said study lead author Suzie Bertisch, M.D., MPH.

"For instance, if you look at two groups of populations, one male and one female, within a specific age range, there's a good chance that the male population has been experiencing OSA symptoms for longer than the female population of the same age," she said.

The study was presented at the 2014 American Thoracic Society International Conference.

To provide a more accurate risk analysis, the researchers re-examined the association between OSA and stroke using data from 5,442 participants of the Sleep Heart Health Study (SHHS), a multi-center study designed to examine the heart-related consequences of sleep-disordered breathing.

SHHS participants underwent baseline polysomnography between 1994 and 1998, and were followed for up to 15.8 years with a median time of 11.4 years.

For this study, patients' apnea levels were divided into quartiles using the [sleep apnea](#) hypopnea index, where level I represents the lowest severity of apnea and IV represents the highest. After analyzing data from the SHHS cohort, the researchers not surprisingly found a significant association between OAHQ quartile and the occurrence of stroke, with greater stroke risk associated with OSA. What was surprising was that they also found that the risk of stroke was equal among male and female study participants, a finding which suggests that women are just as susceptible as men when it comes to the vascular effects of OSA.

"Our results could have a substantial impact on our thinking of the risks associated with sleep apnea in women." Bertisch noted. "From a clinical standpoint, the results could help clinicians provide more proactive treatment for reducing cardiovascular risk in their female OSA patients.

Future studies are needed to evaluate whether sleep apnea treatment lowers [stroke risk](#) in both men and women, and additional OSA studies of female patients are also in order, she added.

More information: Abstract 51645, Sleep Apnea And Incident Stroke: Sleep Heart Health 14-Year Follow-Up Study , Scientific Abstract , 16.03 - Sleep Disordered Breathing: Epidemiology (SRN) , S. Bertisch¹, D.J. Gottlieb², S.F. Quan³, N.M. Punjabi⁴, S.S. Redline⁵;

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