Study shows that snorers vulnerable to earlier cognitive decline. Why?

By ACSH Staff — April 16, 2015

A team of researchers led by Ricardo Osorio, an assistant professor of psychiatry at NYU Langone Medical Center determined that the sleep-disordered breathing (SDB, snoring) disturbances were associated with mild cognitive impairment at least 11 years earlier in groups of people enrolled in a long-term Alzheimer's disease study, even when they controlled for other factors. In the largest group, which relied on self reporting or family reporting, patients exhibited an onset of cognitive problems, such as memory loss, at about 72 years instead of 83 years. The same was true for Alzheimer's disease itself, which started in one group at a little older than age 83, instead of about age 88 in those who did not suffer from SDB, when other factors were ruled out. These results were published online in the journal Neurology.

The dangers associated with night-time breathing disturbances, such as obstructive sleep apnea, are well known: increased risk of high blood pressure, heart attack, stroke and diabetes, not to mention sometimes dangerous daytime drowsiness.

People who would go on to have mild cognitive impairment or Alzheimer's disease tended to first show signs of memory decline years earlier if they had SBD that was untreated. Those without sleep-disordered breathing and those with the disorder who used a CPAP machine all began to experience mental decline at the same age.

Sleep apnea as we understand it, most people think that it only affects males that are obese and snore in middle age, but it is much more common in late life, Osorio told Reuters Health. Late-life sleep apnea is under-recognized and under-diagnosed, Osorio said, and these results may help raise awareness, but should not be alarming to most people.
The study did not establish cause and effect, and Alzheimer’s disease itself can cause sleep problems, he said. But if sleep issues do lead to cognitive decline, it could be due to oxygen deprivation or to sleep fragmentation, he said. Apneas produce arousals and wake you up, so you don’t get nice restorative sleep, Osorio said. It could be that the intermittent cutoff of oxygen to the brain is responsible for the problems, or the sleep disruption itself may be affecting cognition, Osorio said. Studies are underway to determine the cause.

Obstructive sleep apnea, a condition in which airways are blocked for seconds or minutes during sleep, remains sharply under-diagnosed, especially in older people. The American Sleep Apnea Association estimates that 22 million people have it, and that 80 percent of moderate and severe cases are undiagnosed.

Osorio’s study [3] (as discussed in the Washington Post) says 52.6 percent of older men and 26.3 percent of older women have it, but most don’t know it. This is because doctors and health-care providers don’t tend to ask the elderly about apnea and because a higher proportion of them sleep alone, so there is often no one to witness the loud snoring or gasping that accompany apnea.

Like the Hope found at the bottom of Pandora’s Box, there was a small dollop of good news: the researchers found that using a continuous positive airway pressure (CPAP) machine, the treatment of choice for sleep apnea, can prevent or delay cognitive problems: CPAP use delayed the age at MCI onset by about 10 years: 72.6 years vs 82.1 years.

Source URL: https://www.acsh.org/news/2015/04/16/study-shows-that-snorers-vulnerable-to-earlier-cognitive-decline-why

Links
[1] http://www.neurology.org/content/early/2015/04/15/WNL.00000000000001566.abstract