A recent study in the Journal of Clinical Sleep Medicine has found that any use of CPAP will have an effect on mortality rates of patients with overlap syndrome. Overlap Syndrome is the name given to the condition in which a patient has both chronic obstructive pulmonary disease (COPD) and obstructive sleep apnea (OSA). It has been estimated that 11-29% of the people who have OSA also have COPD.(1) Patients with overlap syndrome generally have more severe symptoms than those with OSA or COPD alone.

In the study in question, Stanchina et al. conducted a post-hoc analysis of an outpatient database of 10,272 patients.(2) They identified 3,396 patients with either OSA, COPD or overlap syndrome. The patients were divided into 6 groups: those who were alive and had OSA, COPD or overlap syndrome, and those who were deceased who had had OSA, COPD or overlap syndrome. They found 1,112 patients with COPD, 2,284 patients with OSA and 227 patients with overlap syndrome. Of those with overlap syndrome, 17 patients (7.4%) were deceased.

It was found that any amount of CPAP use was associated with lower mortality in the group with overlap syndrome. The association persisted after adjusting for known confounding factors. Age was also shown to affect mortality, with lower age associated with lower mortality. The living overlap syndrome group of patients had a CPAP compliance rate of 65.9%, while the dead overlap syndrome patients had a compliance rate of 21.2%. Also, although there was not a correlation between CPAP use and age, the mean age of those with the lowest adherence rates was higher than those with higher adherence rates. One other finding was that there was reduced CPAP use in those with the most comorbid conditions, although there was no association between number of comorbid conditions and mortality.

While the study showed some association between amount of CPAP use and mortality, the differences were small. The most significant difference was between those who did not use CPAP at all and those who did. For example, some patients showed a significant reduction in mortality with < 4 hours per night of CPAP use.

The study included a few other findings of note. There was no difference, among the overlap syndrome group, in the mortality rates of those who used supplemental oxygen versus those who did not. This is interesting, since other studies have shown decreased mortality in severe COPD patients who use supplemental oxygen.(3) The study also found no difference, among the overlap group, in smoking rates between those who were alive and those who had died. They did find, however, that smoking rates were higher among those with overlap syndrome, when compared to those with OSA or COPD alone.

Sources