

[Chest](#). 1986 Nov;90(5):686-90.



[Links](#)

Cognitive impairment in patients with obstructive sleep apnea and associated hypoxemia.

[Findley LJ](#), [Barth JT](#), [Powers DC](#), [Wilhoit SC](#), [Boyd DG](#), [Suratt PM](#).

Twenty-six patients with sleep apnea had neuropsychologic testing prior to nocturnal sleep study in a sleep disorders clinic. The cognitive functioning of patients who had sleep apnea with associated hypoxemia was compared to nonhypoxemic patients with sleep apnea. The patients who had sleep apnea with hypoxemia had more severe cognitive impairment than those with sleep apnea without hypoxemia. The hypoxemic patients with sleep apnea had significantly poorer cognitive functioning on four of eight tests (p less than 0.05). In addition, the patients who had sleep apnea with hypoxemia had mean performance scores in the impaired range on measures of attention, concentration, complex problem-solving, and short-term recall of verbal and spatial information. In contrast, the patients who had sleep apnea without hypoxemia had no mean performance score in the impaired range. The degree of hypoxemia during sleep and wakefulness significantly correlated with the degree of overall cognitive impairment as rated by a neuropsychologist; however, measures of sleep fragmentation did not significantly correlate with overall cognitive impairment in patients with sleep apnea. We conclude that patients who have sleep apnea with associated hypoxemia have cognitive impairment which is more severe than those with sleep apnea without hypoxemia.

PMID: 3769569 [PubMed - indexed for MEDLINE]