



SLEEP APNEA AND NEUROLOGICAL DISEASES – STROKE, DEMENTIA AND BEYOND

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Disclosure

**SLEEP APNEA AND NEUROLOGICAL DISEASES – STROKE,
DEMENTIA AND BEYOND**

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NOTHING TO DISCLOSE

In recent years, evidence has emerged for a bidirectional relationship between sleep apnea and neurological diseases.

Learning objectives are to answer to the following questions:

- 1) May be sleep apnea an independent risk factor for neurological disorders ?*
- 2) May sleep apnea influence the course and outcome of neurological disorders ?*

Key messages:

- **Untreated severe obstructive sleep apnea (OSA) doubles the risk for incident stroke; such risk appears especially relevant in young to middle-aged patients.**
- **CPAP treatment is associated with a reduced risk in stroke, when the patients are adherent to CPAP therapy (> 4 h per night).**
- **OSA is a risk factor for recurrence of stroke or TIA and seems to worsen the neurological outcome in stroke patients. However, the favourable effect of OSA treatment in acute stroke patients should more extensively evaluated .**

Key messages:

- OSA has been associated with an increasing risk of developing cognitive decline and dementia, including vascular dementia and Alzheimer's disease (AD).
- Sleep impairment, slow wave sleep disruption, glymphatic system dysfunction, increased intrathoracic and intracranial pressure due to apnea events could be triggering events for AD neuropathological changes.
- CPAP treatment should be started in MCI and AD patients with comorbid OSA, since it could ameliorate disease progression.

References:

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