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LUNG ALERT

Obstructive sleep apnoea and risk of stroke and death

▲ Yaggi HK, Concato J, Kernan WN, *et al*. Obstructive sleep apnea as a risk factor for stroke and death. *N Engl J Med* 2005;**353**:2034–41

The effect of obstructive sleep apnoea (OSA) as a risk factor for stroke and death was investigated in 1022 referrals to the Yale Center for Sleep Medicine. 68% (697 subjects) had OSA as defined by an apnoea-hypopnoea index (AHI) of more than five events per hour. The mean AHI in the patients with OSA was 35 while the mean index for the control group was 2.

Data on stroke and death from any cause was obtained for 842 patients (82%). More than half the patients with OSA were being treated with positive airway pressure. In the group with OSA there were 22 strokes and 50 reported deaths (3.48 events per 100 person years), compared with two strokes and 14 deaths in the control group (1.60 events per 100 person years). After adjustment for age, sex, race, smoking status, alcohol consumption, body mass index, diabetes mellitus, hyperlipidaemia, atrial fibrillation and hypertension, OSA remained statistically associated with an increased risk of stroke and death (hazard ratio 1.97; 95% CI 1.12 to 3.48, $p=0.01$). Increased severity of OSA was associated with an increased risk of developing this composite end point ($p=0.005$).

This study shows that OSA is significantly associated with the risk of stroke and death, independently of other risk factors.

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