



News Release

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Session C19: High Impact Sleep Science
Tuesday, May 19, 2015, 9:30 a.m. – 11:30 a.m.
Location: Colorado Convention Center

Sleep Apnea Linked to Depression in Men

ATS 2015, DENVER — Severe obstructive sleep apnea (OSA) and excessive daytime sleepiness are associated with an increased risk of depression in men, according to a new community-based study of Australian men, which was presented at the 2015 American Thoracic Society International Conference.

“An association between sleep apnea and depression has been noted in some earlier studies,” said lead author Carol Lang, PhD, from the University of Adelaide, Australia. “Our study, in a large community-based sample of men, confirms a strong relationship even after adjustment for a number of other potential risk factors.”

The study involved 1875 men aged between the ages of 35 and 83 who were assessed for depression at two time points over a 5-year period. A random sample of 857 men without previously diagnosed OSA underwent at home polysomnography and completed the Epworth Sleepiness Scale questionnaire.

After adjustment for potential confounders, previously undiagnosed severe OSA was associated with an increased prevalence of depression (adjusted odds ratio [OR] 2.1, 95% CI 1.1-4.0), as was excessive daytime sleepiness (adjusted OR 1.1, 95% CI 1.0-1.2). Men who had both previously undiagnosed OSA (either mild to moderate or severe OSA) and excessive daytime sleepiness had 4 to 5 times greater odds of having depression than men without either condition.

Both previously diagnosed OSA (OR 2.0, 95% CI 1.15-3.45) and previously undiagnosed severe OSA (OR 2.9, 95% CI 1.19-6.92) were significantly associated with recent development of depression.

“Excessive daytime sleepiness and severe OSA were both associated with the prevalence and recent onset of depression in our community-based sample of men, and the presence of both was associated with an even greater risk,” said Dr. Lang. “Men presenting with depression should be screened for OSA, so that an appropriate course of treatment can be planned.”

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** Please note that numbers in this release may differ slightly from those in the abstract. Many of these investigations are ongoing; the release represents the most up-to-date data available at press time.*

Abstract 62529

Obstructive Sleep Apnea (OSA) and Excessive Daytime Sleepiness (EDS) are Associated with Depression in a Community Based Population of Australian Men

Type:

Scientific Abstract

Category:

16.03 - Sleep Disordered Breathing: Epidemiology and Genetics (SRN)

Authors:

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Abstract Body

Rationale: There is still considerable uncertainty regarding an association between OSA and depression in men. We examined the hypotheses that EDS and previously diagnosed and undiagnosed OSA are associated with depression prevalence and incidence in a population-based cohort of community dwelling Australian men.

Methods: Depression was assessed using Beck’s Depression Inventory (BDI)/Centre for Epidemiological Studies Depression Scale (CES-D) in 1875 men aged 35-83 years at two time points approximately 5 years apart. A random sample of men without previously diagnosed OSA (n = 857) undertook at home polysomnography (PSG) and completed the Epworth Sleepiness Scale questionnaire. 1660 men without depression at baseline were included in the analysis of incident depression.

Results: Previously undiagnosed severe OSA (adjusted odds ratio [OR] 2.1, 95% CI 1.1-4.0) was associated with depression prevalence in the cross-sectional analyses even after adjustment for confounders and EDS. EDS (adjusted OR 1.1, 95% CI 1.0-1.2) was also associated with depression. Men with previously undiagnosed OSA and EDS had 4.2 times greater odds of depression than subjects without OSA and EDS and 3.5 times greater odds of depression than individuals with either OSA or EDS alone. Both previously diagnosed OSA (OR 2.0, 95% CI 1.15-3.45) and previously undiagnosed severe OSA (AHI \geq 30) (OR 2.9, 95% CI 1.19-6.92)) at

follow-up were significantly associated with depression onset over a 5 year period. Other PSG parameters including O₂ saturation, O₂ desaturation and arousal index were not associated with depression prevalence or incidence.

Conclusion: Severe OSA and EDS are associated with depression prevalence and onset in men. Clinicians should recognise the risk of OSA in men recently diagnosed with depression, regardless of whether sleepiness is present. However the risk is much higher if both OSA (mild-moderate and severe OSA) and sleepiness are present.