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Lung alert

Snoring is more strongly associated with chronic bronchitis in non-smokers

It has been suggested that patients with chronic bronchitis are more likely to snore during sleep. The authors studied 5015 people in Korea aged 40–69 years who all participated in a comprehensive health examination and on-site interview. Participants who reported symptoms suggesting chronic bronchitis or a previous diagnosis of chronic obstructive pulmonary disease who did not complete questions related to snoring, whose smoking status was not reported or who reported pregnancy during follow-up were excluded.

A total of 4270 participants (52% men) entered the analysis for the first 2 years. Participants were asked about the presence and frequency of snoring. Baseline demographic data showed that frequent snorers were more likely to be older, male, working, heavier, alcohol-consuming smokers and with a history of exposure to chemicals.

During a 4-year follow-up period, 314 new cases (27.1 cases per 1000 person-years) of chronic bronchitis were identified. Follow-up of these patients showed that snoring frequency had a positive linear relationship with the risk of chronic bronchitis. Stratified analysis by smoking showed an association between snoring and chronic bronchitis in never smokers, while a non-significant association was seen in former and current smokers. A similar significant association between snoring and chronic bronchitis was observed among house workers, which was probably related to the association seen in non-smokers since most house workers studied were non-smoking women.

This study provides support for the hypothesis that snoring is associated with chronic bronchitis. As the study did not explore the mechanism of how snorers may develop chronic bronchitis, further investigation is needed to determine the link between these conditions.

► Baik I, Kim J, Abbott RD, *et al*. Association of snoring with chronic bronchitis. *Arch Intern Med* 2008;**168**:167–73.

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Thorax: first published as on 28 April 2008. Downloaded from http://thorax.bmj.com/ on April 23, 2024 by guest. Protected by copyright.