



RESEARCH NEWS

Adult onset asthma may increase risk of heart disease and stroke

Susan Mayor

London

People who develop asthma in adulthood have a notably increased risk of cardiovascular disease (CVD) events including coronary death, myocardial infarction, and stroke than those without asthma, a large prospective study has shown.

The Wisconsin Sleep Cohort study, reported in the *Journal of the American Heart Association*,¹ included 1269 adults (mean age 47.3 ± 8.0 years) without CVD. They were followed up for a mean of 13.9 years for CVD events, including myocardial infarction, angina, stroke, coronary revascularisation, heart failure, or CVD death, recorded in state and national databases.

Increased risk of CVD events has previously been found in people with chronic inflammatory conditions including asthma. The researchers were interested to see whether people with late onset asthma—which is often more severe and refractory to standard drug treatment than asthma that starts at a younger age—was associated with a higher risk of incident CVD.

A total of 166 people taking part in the study had asthma, including 111 with late onset asthma diagnosed at a mean age of $39.5 (\pm 9.6)$ years. People with late onset asthma were more likely than non-asthmatic people to be female (67% v 44%), to have a higher body mass index (32.2 v 29.4), and to be taking antihypertensive medicines (22% v 13%).

Results showed that adults with late onset asthma had a 57% higher risk of incident CVD than non-asthmatic participants

after adjusting for age, sex, and CVD risk factors (hazard ratio 1.57 (95% confidence interval 1.01 to 2.45); $P=0.045$). By contrast, those with early onset asthma showed no higher risk of CVD events than people without asthma.

Matthew Tattersall, lead author and assistant professor of medicine at the University of Wisconsin School of Medicine and Public Health in Madison, USA, said that the results suggested a need to pay particular attention to heart disease risk factors in patients with late onset asthma. “Doctors should be monitoring for high blood pressure and cholesterol closely in these patients and [should] be aggressive in modifying any risk factors,” he said.



1 Tattersall MC, Barnet JH, Corcarz CE, et al. Late-onset asthma predicts cardiovascular disease events: the Wisconsin Sleep Cohort. *J Am Heart Assoc* 2016; published online Aug. doi:10.1161/JAHA.116.003448.

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