Long-Term Exposure to Secondhand Smoke Is Associated With Fatty Liver Disease

People who were exposed to smoke during both childhood and adulthood were at greater risk.

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Continual exposure to secondhand smoke beginning in childhood and extending into adulthood is linked to a higher risk of developing non-alcoholic fatty liver disease (NAFLD), according to findings published in The American Journal of Gastroenterology.

Arising from the accumulation of fat in the liver, NAFLD and its more severe form, non-alcoholic steatohepatitis (NASH), are responsible for a growing proportion of advanced liver disease worldwide. As a result of inflammation, NAFLD can lead to the buildup of scar tissue (fibrosis), cirrhosis (advanced scarring) and even liver cancer. With no effective approved medical therapies, disease management is dependent on lifestyle changes, such as weight loss and exercise.

Feitong Wu, PhD, of the Menzies Institute for Medical Research at University of Tasmania, and colleagues explored the long-term link between passive smoking in childhood and adulthood with development of NAFLD later in life.

The team followed 1,315 people over 31 years. Data on parental smoking during childhood were collected in 1980 and 1983, and information regarding secondhand smoke exposure during adulthood was collected in 2011, 2007 and 2011. In 2011, fatty liver disease was evaluated using ultrasound.

The team found that 16% of the study participants had NAFLD. After adjusting for age, sex and socioeconomic status in childhood as well as physical activity and alcohol consumption in adulthood, secondhand smoke exposure during both stages of life was linked to a greater risk of fatty liver disease. Moreover, people who were consistently exposed to smoke during both childhood and adulthood had the highest risk compared with those who were consistently exposed at only one stage.

“Passive smoking in both child and adult lives are associated with increased risk of adult fatty liver, suggesting that the prevention of passive smoking should start as early as possible and maintain throughout lifetime,” wrote the researchers.

Click here to read the study abstract in The American Journal of Gastroenterology.

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