

Statins have benefits for asthma sufferers

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Statins continue to show that their benefits extend beyond their original focus of lowering high cholesterol. With the increasing prevalence of asthma, scientists are studying the effects of statins in the lungs. In a new study in Physiological Reports, a team of researchers from the University of California, Davis, has demonstrated the feasibility of using statins to treat asthma.

According to the researchers, while a number of studies have supported that <u>statins</u> may be an effective asthma therapy, this new study addresses one of the obstacles in translating the findings into patient use: how to deliver the drug. Because statins are only approved to be taken orally, earlier studies administered the drug to the whole body to study its effects on the lungs. However, it was unclear how the drug was working through the lungs or even if it got there, the researchers wrote. For patient use, direct delivery would be more effective because it lowers the dose needed and reduces the risk of side effects.

In this study, the research team tested whether inhaled statins would alleviate asthma symptoms in mice. Using a new method they developed to measure statin levels, the researchers found that as a spray, the drug went mostly to the lungs, with little going to the rest of the body, and was not toxic. The statin treatment lowered the airway's over-sensitivity to allergens, had modest anti-inflammatory effects and reduced overproduction of mucus. The optimal statin type and dose still need to be determined, the researchers wrote, but "our results indicate that the statins should be explored as a novel class of inhaler therapy for airway diseases such as asthma."



More information: "Intratracheal instillation of pravastatin for the treatment of murine allergic asthma: a lung-targeted approach to deliver statins." physiology.org/con ... /3/5/e12352.full.pdf

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