

Statin Use and Risk for Death After Pneumonia

Statin users were significantly less likely to die in the 6 months after pneumonia diagnoses.

Statin drugs not only lower blood lipid levels but also provide potentially beneficial immunomodulatory and anti-inflammatory effects. In this cohort study, U.K. investigators used a primary care database to assess whether statins protect against all-cause mortality within 6 months after diagnosis of pneumonia.

About 130,000 patients who received statins between 1995 and 2006 were each matched with as many as 5 non-statin users. A statistical method based on propensity scores was used to control for differences between statin users and nonusers. More than 9000 patients developed pneumonia, but only statin users (942 patients) and nonusers (3615 patients) with comparable propensity scores were included in the analysis. Within 6 months of pneumonia diagnosis, significantly fewer statin users than nonusers died (13% vs. 20%; hazard ratio, 0.7).

Comment: In this study, statin users had lower risk for death in the 6 months after pneumonia episodes than did nonusers. Notably, a recent meta-analysis of observational studies suggested that statin use might be beneficial in treating and preventing infections ([Arch Intern Med 2009; 169:1658](#)). Neither the current study nor the meta-analysis, however, establishes causality. Randomized placebo-controlled trials are under way —[according to ClinicalTrials.gov](#)— and should clarify the role of statins in preventing and treating infections.

— [Paul S. Mueller, MD, MPH, FACP](#)

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