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DOES PRE-STROKE STATIN USE INFLUENCE SURVIVAL AND INSTITUTIONALIZATION AFTER HOSPITAL DISCHARGE?

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Background: Meta-analytic findings suggest statin exposure at the onset of acute ischemic stroke (AIS) may improve outcomes. Whether this applies to very old, clinically complex patients remains unclear.

Objective: To compare survival and the composite outcome death/institutionalization between statin users and non-users in a national cohort of AIS patients rehabilitated in skilled nursing facilities (SNF).

Methods: From Medicare Part A claims, we identified 18,551 community-dwelling older adults hospitalized for AIS between 04/01/11-09/02/2012 and discharged to a SNF. Pre-stroke statin use and dose intensity were defined using Part D claims (high intensity, low/intermediate intensity, non-user). Patients were followed for 120 days post-discharge to ascertain death and location at day 120 (SNF/nursing home or community). Patients hospitalized at day 120 were assigned to the location preceding admission. Multivariable log-binomial regression models with a log link estimated the covariate-adjusted relative risks (aRR) for the association of statin exposure with death and death/institutionalization.

Results: The median age of the cohort was 84 years and 39.3% used statins before the AIS, of whom 10.8% received a high-intensity dose. Within 120 days of hospital discharge, 19.8% of high intensity statin users, 20.0% of low-intensity statin users, and 21.3% of non-users died (aRR high intensity vs non-users: 1.01, 95% Confidence Interval (CI): 0.87-1.16; aRR low intensity vs non-users: 0.95, 95% CI: 0.89-1.01). At day 120, 44.5% of high intensity statin users, 47.0% of low intensity statin users, and 49.2% of non-users were dead or institutionalized (aRR high intensity vs non-users: 0.92, 95% CI: 0.85-1.00; aRR low intensity vs non-users: 0.95, 95% CI: 0.92-0.98).

Conclusions: In this large cohort of older patients residing in the community prior to AIS, nearly half were dead or institutionalized 120 days after hospital discharge. Statin use prior to AIS did not appear to confer a mortality advantage in this clinically complex population.

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