



Re: Yang et al. Statins and post-stroke dementia

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Received: 28 June 2022 / Accepted: 22 August 2022 / Published online: 11 January 2023
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Keywords Statin · Dementia · Post-stroke

I read the article by Yang et al. [1], in which the authors conducted a retrospective cohort study to investigate the association between statin use and subsequent risk of dementia in patients with stroke. The adjusted hazard ratios (95% confidence intervals [CIs]) of statin initiation for incident dementia were 0.70 (0.64–0.75) and 0.55 (0.50–0.62) by intention-to-treat and per-protocol analyses. Statin initiation after stroke was associated with lower risk of dementia, and I have a query about the study.

There is a meta-analysis on the association between statin use and incident dementia, and the pooled risk ratios (RRs) (95% CIs) of statin use for Alzheimer's disease and vascular dementia were 0.69 (0.60–0.80) and 0.93 (0.74–1.16), respectively [2]. But there has been no study of reporting the effect of statin use on cognition in post-stroke patients without bias, and there was no significant effect of pravastatin or simvastatin on cognitive status in subjects with history of vascular diseases [3]. These data present that the type of dementia and type of statin may be important factors to understand the relationship.

On this point, Chu et al. [4] reported that the pooled RRs (95% CIs) of hydrophilic and lipophilic statin uses for Alzheimer's disease were 0.619 (0.383–1.000) and 0.639 (0.449–0.908), respectively. In addition, there was no significant risk reduction of all-cause dementia by lipophilic statin use.

I suppose that severity of stroke may be closely related to subsequent dementia incident by limited body movement and decreased quality of life. In addition, other metabolic

components and their treatments would affect the level of cognitive impairment.

Declarations

Conflict of interest The author declares no conflict of interest.

References

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