

Abstract

Background: Simvastatin is commonly prescribed for hypercholesterolemia to reduce vascular risk in patients. Some of these patients have dementia with cognitive defects of several domains. Although protective effects seem to be present, there is emerging evidence that statins cause cognitive impairment. The role of cholesterol in cognitive function is complex. This is reflected in the effects that statins show on cognition functions. The reduction in cholesterol levels seen with statins is effective in improving learning and memory in some patients. However, there is emerging evidence that statins may worsen cognitive function. Similarly, there are major concerns over whether statins alleviate or worsen cognitive problems. The correlation between cholesterol levels and cognitive function is still controversial, mainly due to a lack of robust evidence.

Case presentation: We report the cases of two Asian patients who developed cognitive deficits after starting simvastatin. A 32-year-old man and a 54-year-old woman developed different but clear cognitive deficits that reversed after stopping simvastatin.

Conclusions: The possibility of new-onset cognitive dysfunction and the deterioration of existing cognitive deficits should be considered when prescribing simvastatin to patients.