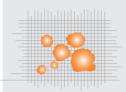
## Statins and memory loss

Linda Bryant MClinPharm, PGDipHospPharmAdmin, PhD, FNZHPA, FNZCP, FPSNZ, MCAPA



## 'I read in the newspaper that statins may cause dementia... so I want to stop my statin'

In February 2012 the FDA Consumer Information website<sup>1</sup> warned that statins may cause subtle cognitive impairment such as mild memory loss or forgetfulness and 'fuzzy' or unfocused thinking. This uncommon adverse effect is reversible on stopping the statin. The mild cognitive impairment is not dementia. Statins do not prevent or treat dementia per se, <sup>2,3</sup> but may help reduce risk of multi-infarct or vascular dementia. It is important for the patient to know that subtle changes in memory or cognitive function does not mean statin-induced dementia.

Onset of cognitive impairment may be within weeks or after several years of statin therapy. The median time of onset is about six months.<sup>1,2</sup> In a survey of 171 people with self-reported memory or cognition impairment, improvement was reported a median of two to three weeks after stopping the statin. A number of patients were rechallenged, with rapid recurrence of cognitive impairment.<sup>4</sup>

The mechanism for statin-induced memory loss is unclear, although it is likely to relate to the medicine rather than the extent of cholesterol-lowering. There is a view that impairment may be related to demyelination of CNS nerve fibres. Although it is difficult to distinguish between any of the statins, it may be that pravastatin, with less tendency to cross the blood-brain barrier or being less potent, has less impact on memory.

# Practical approach to the person who claims to have statin-induced memory impairment

Because cognitive impairment is mild there is a need to identify subtle changes in cognition, usually at a high functioning level. It is difficult to find a suitable evidence-based test of cognition for statin-induced cognitive impairment. If a person thinks that their statin is causing cognitive impairment, a possible method to test this is:

- Do a baseline TSH, lipid profile and cardiovascular risk assessment.
- Administer the Montreal Cognitive Assessment (MoCA, http://www.mocatest.org/)—takes 10–15 minutes.
- Stop statin for three months.
- Repeat MoCA and lipid profile.
- If cognitive function improves, rechallenge with a statin, perhaps pravastatin. Rechallenge is important in case the decline in cognitive function was coincidental to stress or depression.

#### And another potential adverse effect—fatigue

A recent study found that statins may cause low energy and fatigue on exertion in up to 20% of people, particularly women.<sup>5</sup> Benefits of statins are well established, and they certainly have a mortality benefit. Application of this study is to use statins for people with a calculated risk of having a cardiac event the next five years >15%. For people with a lower risk, the potential impact of fatigue on quality of life and activity may outweigh the benefits.

#### References

- 1 FDA expands advice on statin risks (for Consumers) 29 Feb 2012. http://www.fda.gov/ForConsumers/ConsumerUpdates/ucm293330.htm. [cited 2012 Jun 15].
- McGuinness B, O'Hare J, Craig D et al. Statins for the treatment of dementia. Cochrane Database Syst Rev. 2010 (8):CD000714.
- McGuinness B, Carig D, Bullock R, Passmore P. Statins for the prevention of dementia. Cochrane Database Syst Rev. 2009 (2):CD003160.
- 4. Evans M, Golomb B. Statin-associated adverse cognitive effects: survey results from 171 patients. Pharmacotherapy. 2009;29:800–11.
- Golomb B, et al. Effects of statins on energy and fatigue with exertion: Results from a randomized controlled trial. Arch Intern Med 2012; doi:10.1001/archinternmed.2012.2171.

### **KEY POINTS**

Statins may cause mild cognitive impairment:

- Assess cognitive function
- Stop statins for three months
- If function improves, rechallenge with statins

J PRIM HEALTH CARE 2012;4(3):253.

### CORRESPONDENCE TO: Linda Bryant

Clinical Manager, Clinical Advisory Pharmacist, East Health Trust PHO PO Box 38248, Howick Auckland, New Zealand I.bryant@auckland.ac.nz

**NUGGETS** of **KNOWLEDGE** provides succinct summaries of pharmaceutical evidence about treatment of common conditions presenting in primary care and possible adverse drug reactions.