## **Statins and memory loss**

### Dear bpac,

I have had two patients with memory issues report to me that other doctors have suggested they should consider stopping their simvastatin and see if this helps with their memory. What is the evidence for the effects of simvastatin on memory/cognitive function?

## Dr Catherine Fisk, GP Auckland

Memory loss is a rarely reported adverse effect of statins, without proven causality. Several cases of memory loss have been reported to various adverse drug reaction databases, some of which were confirmed by re-challenge with the statin.<sup>1</sup>

The proposed mechanism for memory loss relates to the essential role of cholesterol in myelin production. Statins, especially atorvastatin and simvastatin which are more lipophilic, may cross the blood-brain barrier and decrease the amount of central nervous system cholesterol necessary for the formation of myelin. Inadequate myelin production may result in demyelination of nerve fibres in the central nervous system and thus lead to memory loss.<sup>2</sup>

Memory impairment is common among people in the older age group and can be due to a variety of causes or conditions, often multifactorial. It may be difficult to precisely determine whether a statin is implicated in a case of memory loss.

If a patient experiences memory loss (or any other adverse effect) while taking a statin, the following approach could be considered:

- Stop the statin, observe whether symptoms improve, then re-challenge
- Lower the dose

- Switch to a different type of statin
- If symptoms persist, consider other lipid lowering treatments e.g. nicotinic acid or bezafibrate

There have also been rare reports of impairment of cognitive function with statins, however the evidence is conflicting and inconclusive. While some studies have observed a mild detrimental effect of statins on cognition, others have shown a beneficial effect. In a recent population-based study, there was no significant difference in cognitive performance between elderly participants treated with statins and those who were untreated (controls).<sup>3</sup> There are, however, isolated case reports that raise the possibility that statins, in rare cases, may be associated with cognitive impairment.<sup>4</sup>

#### References

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# Tepid sponging no longer recommended in children with fever

#### Dear bpac

I was surprised to see in your article "Identifying the risk of serious illness in children with fever" (BPJ 29, July 2010) that tepid sponging to reduce a high temperature in a child is no longer recommended. What is the reason for this?

GP, Dunedin

International guidelines such as NICE (United Kingdom) recommend that "tepid sponging" (sponging with warm water) should not be used to reduce fever in children.<sup>1</sup> This may represent a change in practice for some clinicians, who have traditionally recommended this method to parents.

Tepid sponging is no longer in favour as there is evidence that it does not effectively reduce fever and can increase infant discomfort. A Cochrane review failed to find any conclusive evidence of benefit of tepid sponging. However, almost all children who underwent tepid sponging showed typical signs of discomfort and irritability including shivering, "goose bumps" and crying.<sup>2</sup>

Fever is a normal immunological response to infection. Although fever can be upsetting to parents and cause significant anxiety, intervention is only required if it is causing irritability and distress to the child. Paracetamol is the first-line treatment for fever in children.<sup>1</sup> Increased fluids should be encouraged and the child should be neither over-wrapped nor under-dressed.

See "Identifying the risk of serious illness in children with fever" (BPJ 29, July 2010) for further information about managing fever in children at home and warning signs that indicate further intervention is required.

#### References

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