

Statin Effects on the Nervous System

By Michael Richman M.D.

There does not seem to be a day that I don't wake up in the morning and see some negative press regarding statins. Well today was no exception when on Good Morning America, I once again heard that some "expert" said that statins make women lose their memory. It really is getting ridiculous. It would be nice to hear that statins have changed the face of Cardiovascular disease by reducing morbidity and mortality dramatically. Despite this, we still have a long way to go to eradicate Cardiovascular disease which still remains the number 1 killer of men and women in the United States.

I was planning to write on this topic next week, as I have been really busy seeing patients, but thought I needed to take the time to address the new comments. Like I have said before, the Statin Safety Task Force of the National Lipid Association also formed a Neurology Panel to look at the evidence based literature to assess the effects of statins on the Nervous System. First of all, there is no evidence that statins are a common or significant cause of peripheral neuropathy. This is supported by the large randomized clinical trials including the Heart Protection Study (HPS) and the Prospective Study of Pravastatin in the Elderly at Risk (PROSPER). The HPS was the largest statin trial to date and included 20,536 participants who were followed over a 5 year period. It is always possible that a rare case of peripheral neuropathy could occur but this would most likely represent an idiosyncratic reaction which I talked about in a previous posting. In regard to the question whether statins impair memory or cognition in some patients, the answer is that there is no evidence of a causal relation between impaired memory and/or cognitive dysfunction. Besides the HPS and PROSPER, two additional studies have specifically evaluated the effect of statin therapy on patients with Alzheimer's disease, a population group at risk for cognitive decline. In one of the trials, there was a statistically significant reduction in the rate of cognitive decline compared with placebo, suggesting a benefit for Atorvastatin in Alzheimer's disease. This is the exact opposite of what I heard this morning.

I think the best way to approach a patient with peripheral neuropathy or impaired cognition while on statins is to first undergo a thorough neurologic exam by a neurologist in an attempt to find a cause. If this is not possible, it is certainly appropriate to stop the statin to see what happens. Due to the length of time it can take to resolve reversible peripheral neuropathy, the patient should remain off the statin for 6 months. For patients with impaired cognition they should wait about 3 months. If symptoms improve then it is certainly possible that a presumptive diagnosis of being caused by statins can be made. One might want to consider a different statin as the benefits of statins in reducing Cardiovascular Morbidity and Mortality have been proven. If the neurologic symptoms do not improve, the problem may be categorized as unrelated to the statin and therapy may want to be restarted based on a risk-benefit analysis. One must remember that many other causes of impaired cognition and/or peripheral neuropathy in patients taking statins may exist. These include Vascular disease, Diabetes Mellitus, and advancing age, I feel confident in saying that statins do not make women lose their memory.

