



Cardiovascular News Update

Dear Colleague,

Westside Medical Associates of Los Angeles (WMALA) in conjunction with Westside Medical Imaging (WMI) would like to provide you with this weekly update on important new developments in cardiovascular care.

Researchers say statin may decrease dementia, Parkinson's risk. "Simvastatin (Zocor) may enrich the brain as well as help sustain the heart," according to research reported online in *BMC Medicine*. "The statin reduced the risk of incident dementia by more than 54 percent and the risk of newly acquired Parkinson's disease by 49 percent in patients 65 or older, Benjamin Wolozin, M.D., of Boston University, and colleagues reported." An "analysis of data from the 4.5 million men and women included in the Veterans Affairs database found a significant protective effect for simvastatin, but not for lovastatin (Mevacor)." The researchers also found "a non-significant reduction in risk of incident dementia among patients taking atorvastatin (Lipitor)."

Oral anticoagulants may be best for preventing stroke in atrial fibrillation patients. Patients with nonvalvular atrial fibrillation have about a 33 percent lower risk of stroke and major vascular events when treated with oral anticoagulants rather than antiplatelet therapy, findings from a systematic review of clinical trials suggest. According to the review, published online in issue three of *The Cochrane Library*, "The magnitude of the advantage ranged from 29 percent for disabling or fatal strokes to 52 percent for systemic emboli. The two types of therapy had equivalent effects on vascular death and all-cause mortality." Maria Aguilar, M.D., of the Mayo Clinic, and colleagues reported, "The reduction in clinical events with oral anticoagulants came at a price, however: a doubling of the risk of intracranial hemorrhage compared with the risk from antiplatelet drugs." The researchers said, "Despite the advantages demonstrated by the review, physicians should use a risk-adjusted strategy for clinical decision-making about anticoagulants." Dr. Aguilar and colleagues added, "The threshold of benefit that would warrant anticoagulation remains controversial and depends on patient preferences and availability of optimal anticoagulation monitoring."

Early detection saves lives. That's what we do. Find out more at Westside Medical Imaging's website at www.westsidemedimaging.com

CoQ10 and Statin-Associated Myopathy

One of the adverse effects of statins is the development of muscle achiness. Much less common do patients actually develop a myopathy. As treating physicians we are



commonly asked about the use of CoQ10 to prevent these side effects. Here are some important points relative to this:

1. Statins are associated with myopathic complaints ranging from mild myalgia to fatal rhabdomyolysis. The incidence of statin-associated fatal rhabdomyolysis is only 1.5 deaths per 10 million prescriptions. Putative mechanisms for statin myopathy include decreased sarcolemmal cholesterol, increased intracellular lipid producing a lipid myopathy, and mitochondrial dysfunction possibly from reduced intramuscular CoQ10.
2. CoQ10 (ubiquinone) is a naturally occurring antioxidant fat-soluble that is localized in hydrophobic portions of cellular membranes, particularly mitochondria. Approximately half of the body's CoQ10 is obtained through dietary fat ingestion, and the remainder results from endogenous synthesis.
3. Statins block production of farnesyl pyrophosphate, an intermediate in the production of CoQ10. This fact, plus the role of CoQ10 in mitochondrial energy production and the importance of mitochondria in muscle function, has prompted the hypothesis that statin-induced CoQ10 deficiency participates in statin-associated myopathy.
4. CoQ10 is carried in the blood on low-density lipoprotein (LDL) particles, and levels are reduced in persons on statins proportionate to the decrease in LDL. Ezetimibe has no effect on CoQ10 levels. The effect of statins on muscle CoQ10 may be drug and dose dependent.
5. Statins may impair mitochondrial function. The pathologic changes in some patients with statin myopathy are very similar to those of mitochondrial myopathy, including increased intramuscular lipids and ragged red fibers. Some data suggest that patients with a statin myopathy have a pretreatment abnormality in fat metabolism that is exacerbated by statins.
- 6 CoQ10 supplements do raise blood levels. In trials of massive doses of statins (up to 25 mg/kg/day) used for cancer treatment, there was evidence CoQ10 reduced the frequency and severity of muscle-related symptoms.
- 7 Two unpublished randomized trials of CoQ10 treatment for statin myopathy are available in abstract form. In one using vitamin E 400 IU as a control, 100 mg of CoQ10 for 30 days was associated with significant improvement in 18 of 21 patients compared to 3 of 20 with vitamin E. In the second trial, there was no benefit of 200 mg CoQ10/day over 12 weeks of treatment with escalating doses of simvastatin from 10 to 40 mg.
8. Although there is no definite evidence of its effectiveness, CoQ10 supplementation, 200 mg daily, can be tested in patients requiring statin treatment, who develop statin myalgia, and who cannot be satisfactorily treated with other agents. Some patients may respond if only via a placebo effect.



Perspective: The incidence of myopathic symptoms from statins is about 5%. Changing statins, lowering doses, and less frequent dosing of statins with a long half-life are effective measures in some patients, who may also benefit from CoQ10.

Westside Medical Associates of Los Angeles (WMALA) and Westside Medical Imaging (WMI) are premier centers in cardiac diagnosis and treatment. Please feel free to contact Norman Lepor MD, Hooman Madyoon MD or Ivor Geft MD at (310) 289-9955 or check our website at www.westsidemedimaging.com.

If you would like these newsletters to be sent to other friends or colleagues, please note their names and corresponding email addresses by clicking [here](#)

If you do not wish to receive future newsletters, you can unsubscribe by clicking [here](#). Please include your full name and email address