

Statins May Reduce Stroke Risk

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March 5, 2004 — Statins may reduce stroke risk, according to the results of a large randomized trial published in the March 6 issue of *The Lancet*. The investigators recommend that statins be routinely considered for all patients at high risk of stroke.

"This study shows that statin therapy rapidly reduces the incidence not only of heart attacks but also of ischemic strokes, with no adverse effect on hemorrhagic strokes, even among individuals who do not have high cholesterol concentrations," lead author Rory Collins, from the Clinical Trial Service Unit in Oxford, U.K., says in a news release. "Allocation to 40 mg simvastatin daily reduced the rate of ischemic strokes by about one-quarter and so, after making allowance for non-compliance in this study, actual use of this regimen would probably reduce the stroke rate by about a third."

Of 20,536 people enrolled in this five-year study, 3,280 people had a history of stroke or other cerebrovascular disease, and 17,256 people had occlusive arterial disease or diabetes. Compared with the placebo group, the group assigned to 40 mg simvastatin daily had an average reduction in low-density lipoprotein cholesterol of 1 mmol/L.

Stroke incidence was 4.3% (444 strokes) in the simvastatin group and 5.7% (585 strokes) in the placebo group ($P < .0001$). Reduction in stroke incidence became significant during the second year. Proportional reduction in stroke was 25% overall (95% confidence interval [CI], 15% - 34%), and 28% for ischemic stroke (95% CI, 19% - 37%; $P < .0001$). Incidence of hemorrhagic stroke was similar in both groups. Rate of transient ischemic attack and carotid endarterectomy or angioplasty was lower in the simvastatin group.

Stroke incidence was not reduced in patients in the simvastatin group who had a history of cerebrovascular disease, but there was a 20% reduction in the combined risk of all major vascular events (myocardial infarction, stroke, and revascularization procedures; 24.7% vs. 29.8%; $P = .001$).

"The study also provides definitive evidence that statin therapy is beneficial for people with a history of stroke or other cerebrovascular disease," Dr. Collins says. "National and international treatment guidelines should now be revised so that stroke risk reductions are taken into account when the initiation of statin therapy is being considered."

The authors report reimbursement from pharmaceutical companies to attend scientific meetings.

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