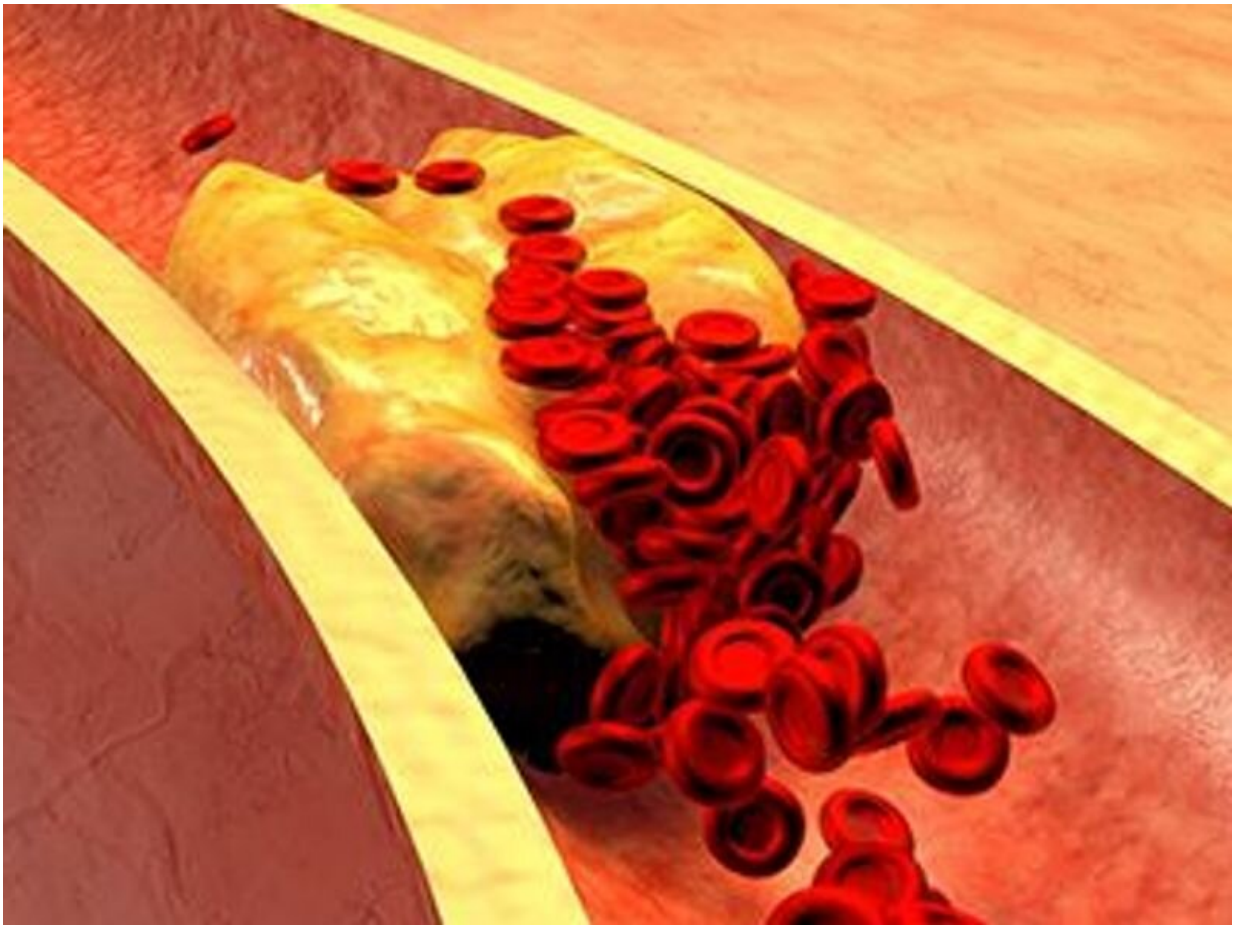
More intensive LDL-C lowering may cut recurrent stroke risk

February 22 2022



Among patients with a history of ischemic stroke, more intensive low-

density lipoprotein cholesterol (LDL-C)-lowering statin-based therapies are associated with a decreased risk for recurrent stroke but an increased risk for hemorrhagic stroke, according to a meta-analysis published online Feb. 21 in *JAMA Neurology*.

Meng Lee, M.D., from the Chang Gung University College of Medicine in Chiayi, Taiwan, and colleagues conducted a meta-analysis of randomized clinical trials to examine the association of more versus less intensive LDL-C-lowering statin-based therapies for patients with ischemic stroke. Data were included for 11 randomized clinical trials with 20,163 patients who were followed for a mean of four years.

- The researchers found that compared with less intensive LDL-C-lowering statin-based therapies, more intensive LDL-C-lowering statin-based therapies were associated with a reduced risk for recurrent stroke (absolute risk, 8.1 versus 9.3%; relative risk, 0.88); this benefit did not differ among LDL-C-lowering strategies.
- Compared with less intensive LDL-C-lowering statin-based therapies, more intensive LDL-C-lowering statin-based therapies were associated with a reduced risk for major cardiovascular events, but with an increased risk for hemorrhagic stroke.
- In trials with all patients with evidence of atherosclerosis, but not in trials with most patients without evidence of atherosclerosis, more intensive versus less intensive LDL-C-lowering statin-based therapies were associated with a reduced risk for recurrent stroke (relative risk, 0.79).

"The message for clinicians is, therefore, that the level of LDL-C should be lowered below 70 mg/dL by any means after an ischemic stroke in patients with evidence of atherosclerosis," write the authors of an accompanying editorial.

More information: Meng Lee et al, Association Between Intensity of Low-Density Lipoprotein Cholesterol Reduction With Statin-Based Therapies and Secondary Stroke Prevention, *JAMA Neurology* (2022). DOI: 10.1001/jamaneurol.2021.5578

Didier Leys et al, Low-Density Lipoprotein Cholesterol Level After a Stroke—Reducing It by Any Means, *JAMA Neurology* (2022). DOI: 10.1001/jamaneurol.2021.5586