Adding clopidogrel to aspirin therapy reduces risk of second stroke
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Aspirin Bottle and pills 325 mg Dose. Credit: American Heart Association

Adding a second drug to aspirin therapy reduced the risk of a second stroke in the weeks after Chinese patients had a minor ischemic (due to a clot) stroke or a transient ischemic attack (TIA), according to research presented at the American Stroke Association's International Stroke Conference 2013.

A minor ischemic stroke is caused by a clot that blocks blood supply to the brain, but its effects are minimal. A TIA, sometimes known as a "mini stroke," occurs when a blood clot temporarily clogs an artery and blocks blood flow to the brain. TIAs and minor strokes don't typically cause permanent harm, but early treatment is critical to prevent the possibility of a major stroke with permanent neurological deficits.

"TIAs and minor strokes are emergencies," said S. Claiborne Johnston, M.D., Ph.D., senior author of the study and professor of neurology and director of the Stroke Service at the University of California, San Francisco. "If we start dual treatment early, it looks like we can reduce the risk of another stroke by more than 30 percent."

In comparison, aspirin therapy alone cuts stroke risk by about 20 percent, he said.

If you've had one or more TIAs, you're almost 10 times more likely to have a stroke than someone of the same age and sex who hasn't, according to the American Stroke Association.

The Clopidogrel in High-risk patients with Acute Non-disabling Cerebrovascular Events (CHANCE) study included 5,174 patients (median age 62, 34 percent women) with minor, clot-caused strokes or TIAs from 114 centers in China.

Within 24 hours, treatment was started with either low-dose aspirin (75-300 mg on the first day followed by 75 mg/day) plus a placebo or the same aspirin regimen plus clopidogrel (an initial 300 mg load followed by 75 mg/day for the first 21 days).

During the 90 days after treatment began, 8.2 percent of patients in the dual therapy group and 11.7 percent in the aspirin-only group experienced another stroke, a significant reduction with dual therapy.

Both aspirin and clopidogrel (Plavix) prevent small particles in the blood from sticking together and
forming clots, so the investigators tracked bleeding incidents to see if dual therapy was safe. During the follow-up, seven (0.3 percent) in the dual therapy group and eight (0.3 percent) in the aspirin only group had a moderate or severe hemorrhage. Rates of bleeding strokes were also the same (0.3 percent).

The large trial is the first to demonstrate that combining clopidogrel with aspirin is safe and better protects against subsequent stroke. However, researchers aren't certain that the study's results apply to other populations.

"In China, stroke and mini-stroke patients are 6-8 years younger on average than Americans, and there are different genetic variations that have an impact on the metabolism of clopidogrel," said Yongjun Wang, M.D., study principal investigator, professor of neurology and vice-president of Beijing TianTan Hospital, Capital Medical University in Beijing, China.

In the United States, the ongoing Platelet-Oriented Inhibition in New TIA and Minor Ischemic Stroke (POINT) trial led by Johnston is also testing dual therapy, with a higher loading dose of clopidogrel and treatment initiated within 12 hours of symptom onset. Results are due in 2016.

"In China, the combination therapy should now be used routinely and systems developed so that TIA and minor stroke are not neglected and treatment is not delayed," Johnston said. "I suspect the study applies to U.S. patients and settings, but we really need to be sure with the POINT trial."

Provided by American Heart Association


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