Cilostazol Beats Aspirin for Stroke Prevention

VITALS

Major Finding: Cilostazol reduced the risk of secondary stroke by 25.7%, compared with aspirin.

Data Source: A postmarketing study of 2,757 noncardioembolic stroke patients.

Disclosures: The study was sponsored by Otsuka Pharma, which makes cilostazol. Dr. Shinohara reported that he has received speaking fees from several pharmaceutical companies, including Otsuka, and is a consultant to Schering-Plough KK and Pfizer Japan.

BY KERRI WACHTER

SAN ANTONIO — The antiplatelet drug cilostazol appears to surpass aspirin in secondary stroke prevention with less risk of bleeding, based on the results of a Japanese study of more than 2,700 stroke patients.

Cilostazol (Pletal) significantly reduced the risk of symptomatic stroke by a quarter (25.7%), compared with aspirin in the Cilostazol Stroke Prevention Study 2 (CSPS-2), Dr. Yukito Shinohara said at the International Stroke Conference.

There were 82 symptomatic strokes among patients on cilostazol, compared with 119 in patients on aspirin, as determined by clinical assessment and CT/MRI. Symptomatic stroke (cerebral infarction, intracerebral hemorrhage, or subarachnoid hemorrhage) was the study's primary end point.

Not only do the results show the noninferiority of cilostazol to aspirin for secondary stroke prevention, but the drug is also significantly more effective than aspirin for preventing recurrent stroke, said Dr. Shinohara, who is a neurologist at Tachikawa Hospital in Tokyo.

"Cilostazol is recommended as an option for the prevention of stroke recurrence in noncardioembolic stroke patients who can tolerate long-term administration of this drug."

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Cilostazol is a phosphodiesterase III inhibitor and is approved in the United States for the reduction of symptoms of intermittent claudication. While the mechanism of action is not fully understood, the drug reversibly inhibits platelet aggregation induced by a variety of stimuli, including thrombin, collagen, arachidonic acid, epinephrine, and shear stress.

In the study, 2,757 noncardioembolic stroke patients were randomized to receive either 100 mg cilostazol twice daily or 81 mg aspirin once daily. Patients were treated for 1-5 years.

Secondary end points included cerebral infarction, ischemic cerebrovascular disorder, and death from any cause.

The efficacy and safety analyses included 1,337 patients on cilostazol and 1,335 on aspirin. The groups had comparable baseline characteristics.

Cilostazol also reduced the secondary end points, compared with aspirin, but the differences did not reach significance.

However, cilostazol did reduce the risk of a cluster of secondary events by 20%. The cluster included cerebral infarction, cerebral hemorrhage, subarachnoid hemorrhage, transient ischemic attack, angina pectoris, myocardial infarction, heart failure, and hemorrhage requiring hospitalization. The combined number of these cluster events was 138 for those on cilostazol and 186 for those on aspirin.

Patients on cilostazol also had significantly fewer bleeding events—23, compared with 57 for those on aspirin.

Headache, diarrhea, palpitations, dizziness, and tachycardia each occurred significantly more often among patients on cilostazol. However, hypertension and constipation occurred significantly more often among patients on aspirin.

Discontinuation because of drug-related adverse events occurred in 20% of patients on cilostazol, compared with 12% in patients on aspirin. ■