Leg pain medication may prevent re-blockage of neck arteries after a stent

February 21 2020

Adding cilostazol—an antiplatelet medication used to treat leg pain—tended to prevent re-blockage of carotid artery stents within two years, according to late breaking science presented today at the American Stroke Association's International Stroke Conference 2020.

Blockage of a neck artery (carotid artery) is a major cause of stroke. Opening the carotid artery with a mesh tube known as a stent is an effective treatment, however, patients can develop a blockage—known as in-stent restenosis, which may increase the risk of recurrent stroke.

Cilostazol is a unique antiplatelet agent. As a phosphodiesterase III inhibitor, it improves endothelial function, inhibits the clumping of blood cells (platelet aggravation), widens blood vessels (vasodilator) and mildly inhibits cell growth. It is FDA-approved to treat leg pain in people with peripheral vascular disease.

"This is the first trial to show potential effectiveness of medical management for the prevention of in-stent restenosis after carotid artery stenting," said Hiroshi Yamagami, M.D., Ph.D., lead study author and director of the Department of Stroke Neurology at National Hospital Organization Osaka National Hospital, Japan.

The Carotid Artery Stenting with Cilostazol Addition for Restenosis (CAS-CARE) study is a multi-center, prospective, randomized, open-label trial evaluating the inhibitory effect of cilostazol on in-stent restenosis, compared to other antiplatelet medications in patients

scheduled to undergo carotid artery stenting.

Eligible patients were randomly assigned to receive cilostazol (50 mg or 100 mg, twice per day), or any antiplatelet agents other than cilostazol, starting three days before stenting and continued for two years. A total of 631 patients (average age 70, 88% men) were included in the full study analysis. In-stent restenosis occurred in 9.5% patients in the cilostazol group and 15% of patients in the non-cilostazol group during two years of follow-up. The rate of cardiovascular event occurrence was about 6% in both groups. Bleeding events were also similar for both groups at 1.1% in those treated with cilostazol vs. 0.3% among those not treated with cilostazol.

Provided by American Heart Association