Drug & Device Development

Olmesartan slows progression of coronary atherosclerosis

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By Victoria Stern

NEW YORK (Reuters Health) - The angiotensin-II receptor blocker olmesartan helps slow the progression of coronary atherosclerosis in patients with stable angina pectoris, according to a report in the March Journal of the American College of Cardiology.

In 205 patients with stable angina who were undergoing percutaneous coronary intervention (PCI), the researchers performed intravascular ultrasonography of the nonculprit vessels. Then they randomly assigned the patients to receive 10 to 40 mg of olmesartan or placebo, along with a combination of beta-blockers, calcium channel blockers, and other medications as advised by the treating physician. The mean patient age was 68 years.

Patients had a second intravascular ultrasound exam 14 months after the first.

Lead author Dr. Atsushi Hirohata from Sakakibara Heart Institute of Okayama, Japan, and colleagues report that at 14 months, the control group had significant plaque progression (as measured by total atheroma volume), whereas the olmesartan group had no change.

In addition, total atheroma volume increased by 5.4% in the control group, versus 0.6% in the olmesartan group ($p = 0.016$).

Atheroma progression was not correlated with major cardiovascular events, however. The researchers found no difference between the groups in rates of cardiovascular death, nonfatal myocardial infarction or nonfatal stroke, coronary revascularization, hospital stay for congestive heart failure, or deterioration of chronic renal failure. Also, they report, blood pressure reduction was similar with placebo and olmesartan.

"It has been reported that there is a delay of 6 to 12 months before the benefits of an angiotensin-II receptor blocking agent emerges," Dr. Hirohata told Reuters Health by email. "It might take several years of treatment for the full benefits to manifest. Longer term follow-up and a larger study might be required to confirm the long-term results, including major cardiac event."

For patients with stable angina pectoris, Dr. Hirohata recommends first-line treatment with statins and anti-diabetic agents. "Olmesartan (or other angiotensin-II receptor blocking agents) might also be considered as a first choice when an additional anti-hypertensive agent is required," he said.

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