Hypertension treatment effective in reversing vascular damage

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A hypertension medication called olmesartan medoxomil is effective in reversing the narrowing of the arteries that occurs in patients with high blood pressure, according to a new study.

Carlos M. Ferrario, M.D., one of the study's lead investigators and director of the Hypertension and Vascular Research Center at Wake Forest University Baptist Medical Center, said, "We believe the data add to the growing evidence for the role of angiotensin receptor blockers in preventing or reversing vascular damage at many stages during this disease process."

The one-year study, titled Vascular Improvement with Olmesartan medoxomil Study (VIOS), was published in the current Journal of the American Society of Hypertension. The study evaluated the effects of an angiotensin receptor blocker (olmesartan medoxomil) vs. a beta-blocker (atenolol) on vascular function and structure in patients with stage 1 hypertension.

Olmesartan medoxomil is marketed in the United States as Benicar® and in Europe as Olmetec® by Daiichi Sankyo, Inc., which funded the study.

After one year of treatment, olmesartan medoxomil improved the artery abnormalities in high blood pressure patients and returned arterial architecture to normal levels. This was not seen with the atenolol.

Olmesartan medoxomil is a member of a class of antihypertensive medications that help lower blood pressure by blocking the angiotensin II receptor on the blood vessels that causes constriction and increase blood pressure. This medication also blocks the release of a hormone that causes salt retention and increased blood volume.

Hypertension affects one in three Americans and, if left uncontrolled for a long time, can cause organ damage, as well as heart disease, stroke and other problems.

Olmesartan is currently being reviewed in several trials, including the Randomized Olmesartan and Diabetes Microalbuminuria Prevention study (ROADMAP), which is investigating the drug's effectiveness in preventing early stage kidney disease in 4,400 patients with type 2 diabetes.

The VIOS results were presented at the Hypertension 2008 symposium, a scientific conference co-hosted by the European and International Societies of Hypertension. Dr. Ferrario was in Berlin, Germany, for the symposium, where he conducted interviews on Sunday and yesterday with international media about the significance of the VIOS data.

Source: Wake Forest University