Cardiovascular News

Ramipril does not significantly reduce AF in patients without LV dysfunction

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MedWire News: Treatment with ramipril does not significantly reduce the incidence of atrial fibrillation (AF) in patients without left ventricular (LV) systolic dysfunction, results of the HOPE study indicate.

Recent clinical trials in patients with LV dysfunction have suggested that inhibiting the renin-angiotensin system with angiotensin receptor blockers (ARBs) or angiotensin-converting enzyme (ACE) inhibitors might decrease the incidence of AF.

Omid Salehian (McMaster University Medical Center, Hamilton, Ontario, Canada) and colleagues evaluated the effect of the ACE inhibitor ramipril on AF rates among patients without heart failure and LV dysfunction enrolled in the HOPE (Heart Outcome Prevention Evaluation) study.

Of the total 9297 participants randomly assigned to receive ramipril or placebo, 8335 patients free from AF and with available electrocardiogram tracings were included in the analysis.

Patients treated with ramipril had a similar incidence of AF as those receiving placebo at 2 years (0.8% and 1.2%, respectively, odds ratio [OR]=0.73, p=0.16), and at 4 years of follow-up (2.0% and 2.2%, OR=0.9, p=0.57).

During the median follow-up of 4.5 years, 117 patients were hospitalized for AF. However, ramipril did not significantly influence the hospitalization rate for AF compared with placebo, at 1.2% and 1.3%, respectively.

Salehian and co-workers conclude in the *American Heart Journal*: "ACE inhibition with ramipril did not reduce the incidence of AF in this population.

"It is likely that ACE inhibition in the setting of a normal LV function does not reduce the incidence of new-onset AF."

However, they add that because of the lack of power in this study, "a moderate but clinically significant treatment effect cannot be clearly excluded, and further prospective randomized studies of ACE inhibitors and ARBs in patients with normal LV function are required to address the possible protective role of these agents on the development of AF."

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