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Delapril/Manidipine
A Viewpoint by Thomas Kahan

Karolinska Institutet, Department of Clinical Sciences, Danderyd Hospital, Division of Internal Medicine, Stockholm, Sweden

The purpose of antihypertensive treatment is to prevent future cardiovascular morbidity and mortality. Although the reduction of blood pressure is the key issue,[1] antihypertensive drug classes may have beneficial effects beyond the effects of blood pressure reduction alone.[2-4] Thus, it is important to study specifically the effects of individual antihypertensive drugs in large long-term trials where cardiovascular events are assessed.

Calcium-channel antagonists and ACE inhibitors are effective antihypertensive drug classes. Clinical trials have shown that long-term antihypertensive treatment with several agents from within these two drug classes reduces the risk of cardiovascular events. Furthermore, in patients with mild to moderate hypertension and additional cardiovascular risk factors, the combination of a calcium-channel antagonist of the dihydropyridine type (amlodipine) and an ACE inhibitor (perindopril) reduced blood pressure to a greater extent than treatment based on a β-adrenoceptor antagonist (atenolol) and hydrochlorothiazide.[5] More importantly, this was accompanied by a reduction in cardiovascular events and all-cause mortality.[5]

The antihypertensive action and potential organ-protective effects of the ACE inhibitor delapril appear to be comparable to other ACE inhibitors. Manidipine is a dihydropyridine-type calcium-channel antagonist with little cardiodepressant effect and an antihypertensive effect similar to other drugs within the class. For both drugs, the reduction in blood pressure is well maintained over 24 hours.

The fixed combination of delapril/manidipine 30/10mg reduces blood pressure effectively, e.g. the placebo-corrected reduction in seated blood pressure was reported to be 11/9mm Hg. The magnitude of blood pressure reduction with delapril/manidipine 30/10mg was similar to that for the combination of an ACE inhibitor or an angiotensin receptor blocker and hydrochlorothiazide. The fixed combination of delapril/manidipine 30/10mg is generally well tolerated, and the adverse effects reported are those commonly seen within the two drug classes. Of note, ankle oedema may be less common with the drugs combined than with manidipine alone.

Thus, the fixed combination of delapril/manidipine 30/10mg is an effective antihypertensive drug regimen, which could be of value in the treatment of hypertensive patients. Other ACE inhibitors and calcium antagonists have been shown to reduce cardiovascular morbidity and mortality. However, we currently lack this important information for delapril and manidipine, and their combination. In light of evidence-based medicine, such studies are important and should be encouraged. ▲

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