Drugs 2002; 62 (9):1354-1356
0012-6667/02/0009-1354/$30.00/0

Olmesartan Medoxomil

A Viewpoint by Toshio Ogihara

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Angiotensin II (AII)-receptor antagonists, also known as angiotensin receptor blockers, are a highly effective and well tolerated class of antihypertensive agents and therefore are often used as first-line treatment for hypertension. So far, several agents such as losartan, valsartan, candesartan, irbesartan, eprosartan and telmisartan have been available on the market for the treatment of essential hypertension. The results of large outcome studies such as Valsartan Heart Failure Trail (Val-HeFT)[1] and RENAAL,[2] indicate that this class of drugs has additional beneficial effects in patients with congestive heart failure and diabetic nephropathy.

Olmesartan medoxomil is the most recently developed AII-receptor antagonist. It produces selective insurmountable inhibition at AII type 1 receptors.[3] The resulting clinical response in patients with hypertension is an effective and prolonged reduction in blood pressure.

In a comparative study[4] of the starting doses of olmesartan medoxomil (20 mg/day), losartan (50 mg/day), valsartan (80 mg/day) and irbesartan (150 mg/day), the effect of olmesartan medoxomil on the primary endpoint of diastolic blood pressure was significantly greater than that of the other agents.

Olmesartan medoxomil is being intensively investigated in a number of organ and vascular protection models. Preliminary results in animals[3] have been encouraging and clinical studies in cardioprotection, atherosclerosis and diabetic nephropathy are underway.

The safety profile of olmesartan medoxomil is similar to that of placebo and, unlike angiotensin converting enzyme inhibitors, the incidence of dry cough is rare,[5] which can have a significant impact on patient compliance.

Olmesartan medoxomil, soon to be launched worldwide, demonstrates class-leading efficacy, and emerging organ and vascular protection data should ensure that this agent is considered useful in hypertensive patients with additional cardiovascular risk factors. ▲

References

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