

Comparative Efficacy Evaluation

of Amlodipne/Ramipril Combination

with Essential Hypertension

{Original Article (Biochemistry)}

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ABSTRACT

Introduction: The reduction of blood pressure lower than 130/85 mmHg provides additional benefits regarding both protection of organs and cardiovascular mortality. Amlodipine is a calcium channel-blocking agent with vasodilator activity and Ramipril is ACE inhibitor.

Objective: the objective of this double-blind, comparative study evaluating the efficacy of Amlodipine 5mg and Ramipril 1.25mg in combination and as mono therapy in adult patient with essential hypertension.

Study design. Double-blind, comparative study

Place and Duration of Study: This study was conducted in the department of Biochemistry, University of Karachi from February 2011 to July 2011.

Materials and Methods: This was multicenter randomized, double-blind, comparative study. Patients were selected from different hospitals of Orangi Town Karachi from February 2011 to July 2011 and study was conducted in the department of Biochemistry, University of Karachi. Patients were randomized to receive Amlodipine (5mg) once daily Ramipril (1.25 mg) once daily for 8 weeks. The analysis of antihypertensive efficacy and biochemical effects of a therapeutic regimen in the long term becomes important. In study patients were randomized to receive amlodipine 5mg once daily, Ramipril 1.25 mg once daily, the combination of amlodipine 5mg with Ramipril 1.25 mg once daily.

Results: In the patients treated with combination of Amlodipine 5mg and Ramipril 1.25mg tablets blood pressure reduction was significantly lower, reaching values of 130.4 ± 10.2 / 84.1 ± 7.4 mmHg by the end of eight weeks of treatment .

Conclusion: The results of this study demonstrated that the combination of amlodipine 5mg with Ramipril 1.25 mg once daily has a high antihypertensive efficacy and showed synergetic effect.

Key Words: Amlodipine, [hypertension](#) , Ramipril, systolic blood pressure.

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