



Interaction of Antihypertensive Drugs with Atorvastatin in Hyperlipidemic Cardiac Patients

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SUMMARY. The present study was undertaken to reveal the possible influence of atenolol, amlodipine and amlodipine plus lisinopril upon lipid lowering profile of atorvastatin in cardiac patients with hyperlipidemia and hyperlipidemia plus hypertension attending a tertiary care cardiology hospital. Selected patients were divided into four groups. Group A (n = 9) declared as control and the patients in this group received oral dose of atorvastatin (20 mg/day) without antihypertensive medication, group B (n = 9) patients received atorvastatin (20 mg/day) along with atenolol (50-100 mg/day) as antihypertensive agent. Whereas group C patients (n = 9) being recipients of atorvastatin (20 mg/day) and amlodipine (5-10 mg/day) as anti-hypertensive medication. In the last group D (n = 9), the patients were treated with a combination of lisinopril (5 mg/day) and amlodipine (5-10 mg/day) with same lipid lowering agent, atorvastatin (20 mg/day). The effectiveness of the regimen was assessed by estimating fasting serum lipid profile at zero (initial), 15th and 45th days of therapy. The data demonstrate the negative influence of atenolol on lipid lowering action of atorvastatin as β_1 -receptors blockade by atenolol on lipocytes in adipose tissues may impair the lipolytic effect and resulted in elevation of serum triglycerides levels. By these findings it is suggested that amlodipine and lisinopril should be preferred over atenolol, a β_1 cardio-selective receptor blocking drug in situations where co-administration of atorvastatin is essential.

KEY WORDS: Amlodipine, Atenolol, Atorvastatin, Lisinopril, Hyperlipidemia, Hypertension, Lipid profile.

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