



## A Prospective Interventional Study on Clinical Effects of Cilnidipine in Hypertensive Patients

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**Abstract: Aim:** The aim of the present study was to evaluate the clinical effects of Cilnidipine on sympathetic nervous system, blood pressure, heart rate, renal function and lipid profile in hypertensive patients.

**Methods:** A prospective interventional study was conducted in a total 45 hypertensive patients using other calcium channel blockers for more than 2 months. They underwent a drug free period of 7 days and a treatment period with Cilnidipine for 8 weeks. Sympathetic function tests and blood glucose test, lipid profile test, serum creatinine and Albumin Creatinine Ratio were performed at the baseline and 8 weeks after completion of Cilnidipine treatment.

**Results :** Cilnidipine is effective in reducing heart rate and blood pressure when compared to baseline values. Sympathetic function tests showed significant improvement after Cilnidipine treatment. ACR and serum creatinine levels have decreased significantly from the baseline values showing renoprotective effect of Cilnidipine. Blood glucose levels did not significantly change when compared to baseline levels except in diabetic patients with hypertension. Lipid profile does not show significant change from the baseline values except for the triglycerides in diabetic patients with hypertension.

**Conclusion :** Cilnidipine is an effective once-daily antihypertensive agent. As it inhibits both L- and N-type calcium channels, it will be useful for patients with hypertension and cardiovascular disease, sympathetic over activity, diabetes mellitus, dyslipidemia or renal disease and proves to be a better alternative to existing calcium channel blockers. Therefore, Cilnidipine can be selected as treatment option according to the pathophysiological condition of the patient.

**Key words:** Hypertension, Dyslipidemia, Diabetic, Cardiovascular disorders.

Shravanthi Manthri *et al* /Int.J. PharmTech Res. 2015,8(10),pp 70-76.

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