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## Comparative Study of Efficacy of Rosuvastatin Versus Atorvastatin at Low Dose

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### ABSTRACT:

**Dyslipidemia** refers to the derangements of one or many of the lipoproteins. Elevations of total cholesterol, low density lipoprotein (LDL) cholesterol and/or triglycerides, or low levels of high-density lipoprotein (HDL) cholesterol while elevation of lipoproteins alone is labelled as 'hyperlipidemia'. The term atherogenic dyslipidemia shows a combination of elevated triglycerides and small-dense LDL particles, and low levels of HDL- cholesterol. The aim of the present study was to compare the efficacy of Rosuvastatin versus Atorvastatin at low dose on Indians. A total of 60 patients were enrolled in the treatment program. A prospective observational study was carried out to compare the efficacy of rosuvastatin versus atorvastatin. The selected patients were divided in to two groups. Group A, Group B. Each group to contain 30 patients. Group A was to be treated with rosuvastatin. Group B was to be treated with atorvastatin. Primary parameters like Total cholesterol, High density lipoprotein, Low density lipoprotein, Triglycerides, BMI were studied and Secondary parameters like Serum creatinine level, Serum urea level were studied. Information collected regarding all the selected cases were recorded in a Master Chart. Data analysis was done with the help of computer using Epidemiological Information Package (EPI 2010) developed by Centre for Disease Control, Atlanta. Using this software range, frequencies, percentages, means, standard deviations, chi square and 'p' values were calculated. Kruskal Wallis chi-square test was used to test the significance of difference between quantitative variables and Yate's chi square test for qualitative variables. A 'p' value less than 0.05 is taken to denote significant relationship. In this study of selected patients with dyslipidemia, rosuvastatin 5mg was associated with significantly greater reduction in total cholesterol, low density lipoprotein, and increase in high density lipoprotein levels when compared with atorvastatin 10mg. The greater efficacy of rosuvastatin at starting dose should help to reduce the need for dose titration and enable more patients to achieve recommended treatment goals in clinical practice. Improvements across the whole atherogenic lipid profile, including increase in high density lipoprotein cholesterol may provide further reduction in the risk of cardiovascular disease.

### KEY WORDS:

Dyslipidemia, Rosuvastatin, Atherogenic lipid profile, Triglycerides.

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