

# **Comparative evaluation of atorvastatin and rosuvastatin in patients of dyslipidemia**

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## **Cited in:**

Comparative evaluation of atorvastatin and rosuvastatin in patients of dyslipidemia

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## **Abstract**

Rosuvastatin is a newer member of statins which is more expensive and frequently prescribed than existing members of this group. The aim of this study was to compare the effects of atorvastatin and rosuvastatin on the lipid profile and their safety profile in Indian population with dyslipidemia. This 12 week, open-label, randomized study was conducted at the department of Pharmacology and Medicine, Government Medical College, Amritsar (Punjab), India. Patients aged 30 to 70 years with dyslipidemia were eligible. Patients were assigned to one of two treatment groups. Group I received atorvastatin and group II received rosuvastatin. Both drugs were given in dose 10mg/d for 12 weeks. The lipid profile (low density lipoprotein cholesterol (LDL-C), high-density lipoprotein cholesterol (HDL-C), total cholesterol (TC), non high density lipoprotein (non HDL-C), triglycerides (TG) and very low density lipoprotein (VLDL-C) were measured before the start of therapy and at 6 and 12 weeks of treatment. Percentage changes from baseline were calculated. Adverse effects (AEs) were recorded at weeks 6, 12 and through spontaneous reporting. Sixty patients (31 men, 29 women) were enrolled; 30 patients per treatment group. In group I, the mean percentage decrease in levels of TC, LDL-C, non HDL-C, TG and VLDL-C were 28.15%, 30.77%, 37.28%, 50.75% and 50.75% respectively whereas mean percentage increase in HDL-C level was 32.15%. In group II, mean percentage decrease in levels of TC, LDL-C, non HDL-C, TG and VLDL-C were 42.26%, 49.03%, 51.15%, 60.91% and 60.91% respectively whereas mean percentage increase in HDL-C was 29.26%. Myalgia, nausea, vomiting and headache were the adverse effects observed in both groups. In this study in Indian patients with dyslipidemia, rosuvastatin therapy has shown greater favourable changes in lipid profile in comparison to atorvastatin. Adverse effects were almost similar in both groups.

## **Reference**

Lipoprotein Composition of normal healthy subjects in northern India. The Indian Journal of Medical Research 75(3):393-401, 1982