

### Low requirements for average statins dosage in South Indian populations titrated to target lipid parameters

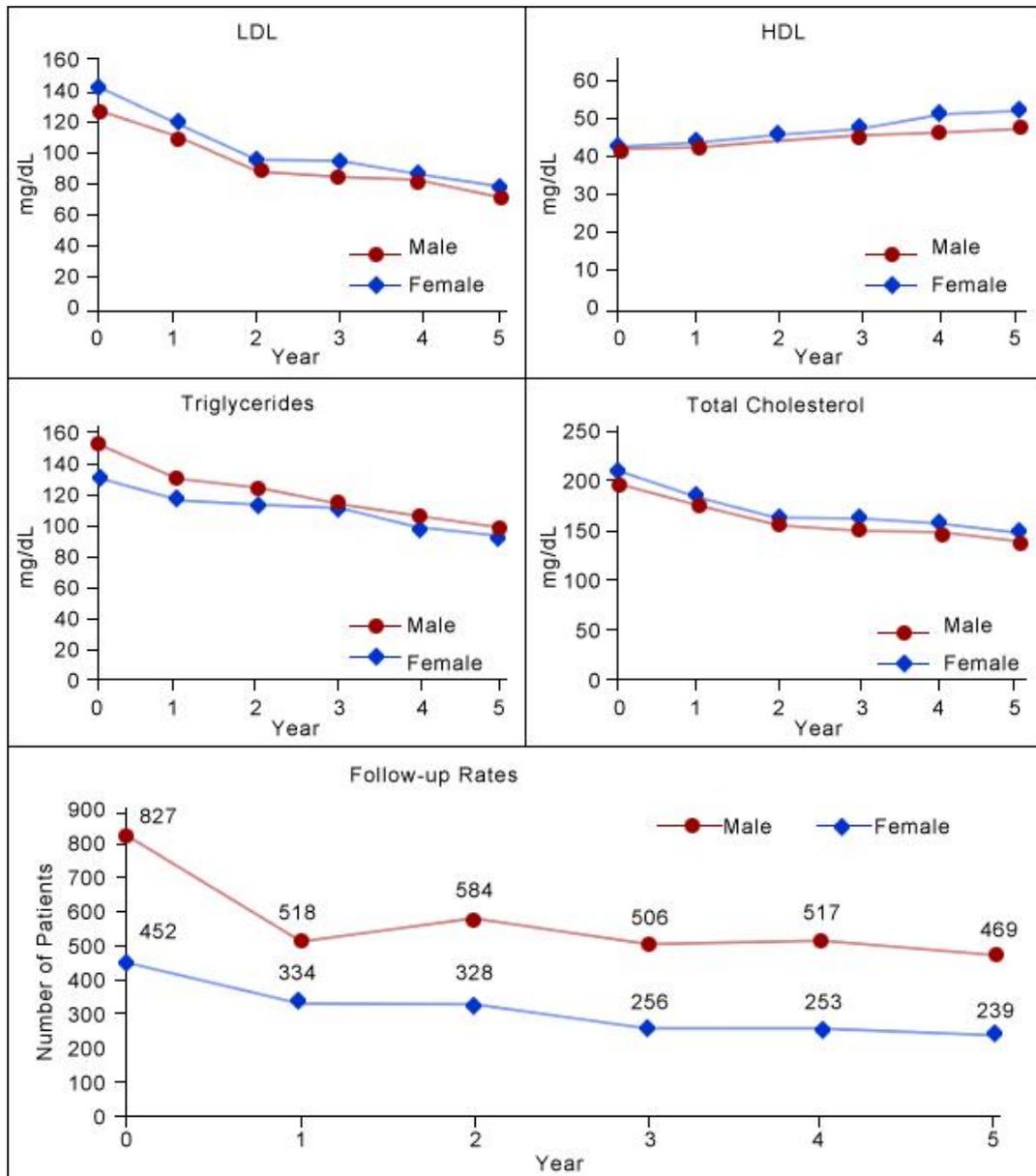
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**Background and aims:** The treatment option for reaching LDL goals for Asians compared to other ethnicities, needing a less average statin dose, is a cost effective one. However, a major reason for the alarming rise in the cardiovascular disease epidemic in India could be attributed to irregularities in use of statins. Earlier, the reasons reported by researchers for a non-compliance to statin therapy in more than 60% of defaulters was due to the subsequent fear of adverse effects or due to a misconception of being employed unnecessarily on an extra drug prescription. Therefore, the current study of a retrospective cohort of patients presented at the researchers' clinic between the years 2006 and 2007 was performed with the aim to examine the trends of lipid parameters, dosage requirements and compliance patterns.

**Methods:** As a part of this study protocol, researchers examined the records of 1, 279 T2DM patients treated for dyslipidemia, who were identified after their information was removed; these patients were aged above 25 years (65% males had a mean age was  $51.9 \pm 11.1$  years; 35% females had a mean age of  $52.6 \pm 10.8$  years). At researchers' center, T2DM patients with high risk were prescribed statins with a treatment intention to achieve the target LDL goal below the level of 70 mg/dl. Patients were followed up via a Diabetes Tele Management System (DTMS®) by a multi-disciplinary team of doctors, dieticians, pharmacists, psychologist etc, where the compliance to statins and anti-hypertensives in addition to the glycaemic management were ensured.

**Results:** Follow-up rates showed sharp dropout after one or two visits to the clinic (37% males, 26% females), followed by relatively steady pattern in subsequent years. Lipid parameters of both dropouts and followed-up patients were similar initially, with average LDL levels of 135mg/dL in females and 124mg/dL in males (figure below).

Figure:



All patients with regular follow-up had significant improvements in all lipid parameters, with most of the changes being reported by those with 5-years follow-up. The top 3 drug/dose combos and associated LDL patters were atorvastatin 10mg (30%; mean LDL 74 ±30 mg/dL), atorvastatin 5mg (13% subjects; 66 ±22mg/dL) and rosuvastatin 5mg (10%; 61 ±28mg/dL). The mean dose of atorvastatin as monotherapy among patients with LDL <100mg/dL was 14.7mg and that of rosuvastatin monotherapy was 7.2mg.

**Conclusion:** The study demonstrated a low average dosage requirements of statins in South Indian populations titrated to target lipid parameters, and the low compliance rate that seems to exist, pose a significant public health concern. Considering the low optimal dose of statins required in the majority of T2DM patients to keep LDL levels at goals, this is undoubtedly a cost effective option. Widespread public health campaigns have to be promoted to maintain statin compliance among diabetes patients.

source: DiabetoValens.com