Efficacy of oral rosuvastatin intervention on high density lipoproteins (HDL) and its associated proteins in men with type 2 diabetes mellitus (T2DM)

Naresh S, et al. Endocrine. 2021 Jan; 71(1):76-86.

- Men with T2DM on oral antidiabetic treatment with low density lipoproteins (LDL-C) levels >75 mg/dL and willing for rosuvastatin intervention (20 mg/day orally for 12 weeks) were included in this study.
- Rosuvastatin produced a significant decrease in lipids (total cholesterol, triglycerides, LDL-C), oxidative stress (oxLDL, oxHDL), inflammation (Tumour Necrosis Factor-α - TNF-α) and significant increase in anti-atherogenic HDL and cholesterol efflux.
- With rosuvastatin, there is a quantitative and qualitative improvement in HDL, which helps in its reverse cholesterol transport (RCT) and anti-oxidant functions.

Improvement in HDL functions and suppression of inflammation by rosuvastatin lead to regression in carotid intima-media thickness (cIMT), which is beneficial in decreasing the progression of cardiovascular disease (CVD) in men with diabetes.