The Lipid Association of India (LAI) Expert Consensus Statement on Management of Dyslipidemia in Indians 2016: A Giant Leap Forward!

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Statin therapy is currently the bedrock of prevention and treatment for cardiovascular disease (CVD), especially coronary artery disease (CAD). More importantly, statin therapy is no longer limited to those with high low-density lipoprotein (LDL-C) or non-high-density lipoprotein (non-HDL-C) cholesterol levels. A 10-year CVD risk threshold of 5% is reasonably appropriate for statin therapy among Indians.¹ Recent scientific evidence confirms that benefits of statin therapy outweigh risks in adults with 10-year CVD risk as low as 3% and a lifetime risk as low as 30%.² Several genetic studies confirm that CVD risk reduction with lifelong low LDL-C levels is 3-5 times greater than decreasing LDL-C in middle age.¹ Many statins are approved for use in high-risk children as early as at 10 years of age.³

We commend Iyengar et al⁴ for publishing the LAI Consensus Statement on the Management of Dyslipidemia, which provides an elegant framework for the aggressive management of dyslipidemia in Indians—a population with the highest risk of premature CAD.⁴ The recommendations are timely, scientifically robust and incorporate relevant elements from the most recent guidelines released in the United States and the United Kingdom. The major strengths of the LAI Statement are:

1. Rendering non-fasting non-HDL-C and fasting LDL-C as co-primary treatment targets and shifting the focus of treatment from elevated LDL-C to elevated CVD risk.
2. Using lower, stricter treatment goals (LDL-C <50 mg/dl and non-HDL-C <80 mg/dl) for very high risk Indians—those with established CVD and most cases of diabetes (evidence of end-organ damage or 2 major CVD risk factors).
3. Provision for counting major CVD risk factors to simplify the risk stratification in primary prevention. The major risk factors are: age ≥45 years in males and ≥55 years in female; family history of premature CVD <55 years in a male or <65 years in a female first degree relative; current tobacco use; hypertension; HDL <40 mg/dl in males and <55 mg/dl in females.
4. Selection of QRISK 2, which has a built-in calibration factor of 1.5 for Indian men and 1.4 for Indian women and additional risk factors not found in American College of Cardiology/American Heart Association Pooled Cohort Equation for risk estimation in primary prevention.
5. Categorizing ≥3 risk factors or 10-yr risk >15% as high risk with a treatment goal of LDL-C <70 mg/dl and non-HDL-C <100 mg/dl (although >10% would be preferable).
6. Categorizing 2 risk-factors or 10-yr risk of 5-15% as moderate risk with a treatment goal of LDL-C <100 mg/dl and non-HDL-C of <130 mg/dl (although 5-10% would be preferable).
7. Lowering the low risk threshold (not requiring statins) to <5% and recommending a life-time risk estimation in all such individuals and categorizing those found to have a lifetime risk >30% or non-HDL-C >160 mg/dl as moderate risk and therefor eligible for statin therapy.
8. Provision of categorizing individuals with coronary artery calcium score (CACS) ≥300 Agaston units or lipoprotein(a) ≥50 mg/dl as high risk. Moderate risk individuals with CACS 100-299 Agaston units, lipoprotein(a) 20-49 mg/dl or metabolic syndrome would be reclassified as high-risk. Both tests are particularly useful in patients with family history of premature CAD.
9. Highlighting the potential need for high-intensity or moderate intensity statin therapy for most Indians with or at risk of CAD including those with high triglycerides (>200 mg/dl and <500 mg/dl).
10. Introducing “Life’s Simple 7 for Indians” by making the required modifications/substitutions to “Life’s Simple 7” by the American Heart Association: Body mass index (BMI <23 Kg/m² instead of BMI <25) and LDL-C <100 instead of total cholesterol <200 mg/dl.

A pplied nationwide, the recommendations have the potential to achieve the 20% reduction in the prevalence of elevated cholesterol—a key component of United Nation’s goal “25×25” - 25% reduction in premature mortality by the year 2025.

References