Abstract
Cardio and cerebrovascular diseases (CVDs) are multifactorial in etiology, and share some common risk factors. The death rates of these diseases are incredibly increasing due to the fact, the markers that are in existence fail to introspect the situation in detail. The Framingham Study showed that 35% of cases of coronary heart disease (CHD) were in people with normal total cholesterol (TC) levels, although the impact of elevated cholesterol on stroke risk has been disputed. These findings point out the need for markers that better predict cardiovascular risk. In the most recent years, special importance is being laid on the role of inflammation in the pathogenesis of atherosclerosis and its complications. A number of studies have examined various circulating markers of inflammations (e.g., serum amyloid A, interleukin etc.), out of those so far studied, high-sensitivity C-reactive protein (hsCRP) seems to have the most consistent relation to the risk of CVDs in a variety of clinical settings. The objective of the present study, therefore, was to assess the prognostic value of hsCRP alone, as well as in combination with various blood lipids in patients with CVDs. The results of the present study, along with the other analyses of large population-based cohorts, confirmed the inclusion of hsCRP as a risk marker for CVDs to have important implications.

The most important role of the drug statins in the reduction of serum lipids has been well documented in both primary and secondary prevention studies. However, these agents remain underutilized in several settings. More recently, evidence suggesting that statins may positively impact many organ systems and disease states independent of lipid reduction, has emerged and their anti-inflammatory properties have also been investigated. Hence, the present study was also designed to determine the effect of atorvastatin on hsCRP and various other biomarkers in patients with CVDs. The beneficial effect of atorvastatin was evident at the 3rd month and at the end of the study (12th month). This study proves that the hsCRP level achieved after atorvastatin therapy may be as important as the LDL cholesterol level achieved. These findings suggest that statin-mediated anti-inflammatory effects in addition to its lipid lowering properties, may contribute to the ability of atorvastatin to reduce risk for CVDs. It is to be highlighted that the single drug atorvastatin, has multiple impacts on different pathways of the multifactorial etiology of CVDs. This is supporting the practice of early introduction of atorvastatin in high-risk patients.