

Lipoprotein(a) and Lipid-Lowering Strategies in Patients with Acute Coronary Syndrome: A Single-Center Retrospective Study

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Introduction. The management of elevated lipoprotein(a) [Lp(a)] is currently based on optimization of modifiable risk factors, particularly on reduction of low-density lipoprotein cholesterol (LDL-C). The purpose of this study was to assess the LDL-C-lowering strategies in relation to Lp(a) in patients with acute coronary syndrome (ACS).

Methods. This retrospective, single-center study included 101 patients with Lp(a) levels measured during hospitalization for ACS. Elevated Lp(a) was defined as levels ≥ 105 nmol/L.

Results. The mean age was 59.2 ± 13.2 years, 21.8% were female, and 29.7% displayed elevated Lp(a). Overall, 43.3% and 29.6% of patients with elevated and non-elevated Lp(a), respectively, were on any statin before admission. The median LDL-C measured during hospitalization was 95.5 [76.3–139.0] mg/dL in those with elevated Lp(a) and 113.0 [85.0–142.0] mg/dL in those with non-elevated Lp(a). Overall, 10.0% and 16.9% of patients with elevated and non-elevated Lp(a), respectively, were classified into the extreme-risk category, while the remaining patients were at very high risk. The median percentage LDL-C reduction required from baseline to achieve the LDL-C goal was 56.5 [50.0–68.8]% and 56.0 [50.0–69.0]% in the elevated and non-elevated Lp(a) groups, respectively. At discharge, 40.0% and 21.2% of patients with elevated and non-elevated Lp(a), respectively, received high-intensity statin with ezetimibe, while the remaining patients received statin monotherapy. Discharge lipid-lowering therapy aligned with the required LDL-C reduction in 57.7% of those with non-elevated Lp(a) and in 73.3% of those with elevated Lp(a).

Discussion. The extent of guideline-recommended LDL-C reduction did not differ between patients with elevated and non-elevated Lp(a). Combination lipid-lowering therapy was underutilized in both groups.

Keywords: Lipoprotein(a), Lipid-Lowering Therapy, Acute Coronary Syndrome, Secondary Prevention

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