

Title: Statin Therapy and Low-density Lipoprotein Cholesterol reduction after Acute coronary syndrome: Insights from the United Arab Emirates

Category: Prevention

Abstract

Background: The benefits of statin therapy to lower low-density lipoprotein cholesterol (LDL-C) after an ACS have been established. Attaining guideline-recommended LDL-C goals (<70 mg/dl or $\geq 50\%$ reduction) with statin therapy is still suboptimal.

Aim: To assess the level of lipid-lowering therapy (LLT) utilization and achievement of LDL-C targets after ACS hospitalization in UAE.

Methods: A retrospective, observational, longitudinal database analysis of Emirati patient's data with ACS or stable CHD from 2015 to June 2018 were evaluated. Patients were divided into two subgroups based on whether or not they were being treated with LLT at index hospitalization with ACS. LDL-C target level achievement was assessed according to the 2013 ACC/AHA and ESC/EAS guidelines.

Results: 3,066 patients met the inclusion criterial, and the mean age was 65.5 ± 14 years. Overall, 58.1% (N=1782) of the patients in the cohort were on LLT during the ACS hospitalization. At discharge, the mean LDL-C levels were 84.8 ± 39.0 mg/dl, and 28% received high-intensity statin, 21% moderate-intensity statin and low-intensity statins (9%). At 6-months (n=2046; 66.7%), 27.7% achieved LDL-C threshold level (<70 mg/dl) and 16.7% (70-100 mg/dl). The highest level of LDL-C reduction by 50% within 6-months was noticed in patients using moderate-intensity statin (37.2%) than high- and low-intensity statins (35.6% and 32.1%).

Conclusion: A large proportion of Emirati patients were not on LLT after ACS, and the rates of LDL-C target value attainment was extremely poor (27.7%). Optimal statin utilization by closely implementing the guidelines in UAE is recommended.