Abstract: P944
Comparing therapeutic gap in lipid-lowering management between high-risk cardiovascular patients after acute coronary syndrome, stroke and critical limb ischemia

Authors:
BPY Yan¹, CKY Chan¹, WHS Lai¹, OTL To¹, ¹The Chinese University of Hong Kong, Medicine & Therapeutics - Hong Kong - Hong Kong,

Topic(s):
Peripheral Vascular and Cerebrovascular Disease – Epidemiology, Prognosis, Outcome

Citation:
Background: Guidelines recommend intensive low-density-lipoprotein cholesterol (LDL-C) lowering in high cardiovascular (CV) risk patients with acute coronary syndrome (ACS), stroke and critical limb ischemia (CLI).

Purpose: We evaluated LDL-C goal attainment and lipid-lowering treatment (LLT) in a Chinese population with ACS, stroke and CLI patients.

Methods: We retrospectively evaluated consecutive high CV risk patients discharged between 2013 and 2017 from 3 hospitals in Hong Kong. Lipid profile and LLT were compared among 3 patient groups: ACS, Stroke and CLI.

Results: Of 10,168 high-CV risk patients (mean age 70.6±13.7 years; 62.4% male), 64.0% were ACS, 33.6% stroke and 2.5% CLI. Between baseline and 12-month, mean LDL-C reduced from 2.7±1.1 to 2.0±0.8 mmol/L in ACS patients, 2.7±1.0 to 2.0±0.7 mmol/L in stroke patients and 2.5±1.0 to 2.2±0.9 mmol/L in CLI patients (p<0.01). Proportion of CLI patients (29.9%) who achieved target LDL-C <1.8mmol/L at month 12 was significantly lower than stroke (45.6%) and ACS (48.2%) patients (p<0.01). The mean residual distance to target LDL-C was greatest in CLI (0.8±0.8 mmol/L) compared to stroke (0.6±0.6 mmol/L) and ACS (0.7±0.7 mmol/L) patients (p<0.01). Use of statin therapy on discharge was highest in ACS (88.4%) compared to stroke (78.3%) and CLI (52.6%) patients (p<0.01). But use of high-potency statin (rosuvastatin =20mg, atorvastatin =40mg or simvastatin =80mg) on discharge was very low in stroke (3.0%) and CLI (2.0%) compared to ACS (21.4%, p<0.01) patients. At 12 months 28.8% ACS, 34.3% stroke and 51.4% CLI patients were on no LLT (p<0.01) and the use of high-potency statin did not change significantly (3.0% in stroke, p=0.99; and 1.2% in CLI, p=0.48). Despite the poor achievement in LDL-C target in CLI patients, the proportion of CLI patients switching to high-potency statin (0.8%) was significantly lower than stroke (1.3%) and ACS (5.2%) patients (p<0.01).

Conclusion: This study demonstrated significant therapeutic gaps in lipid-lowering management in high CV risk patients. In particular, CLI patients were less aggressively treated with LLT and hence larger proportion of patient not achieving LDL-C target compared to ACS and stroke patients.