Title: GENDER AND THE USE OF HIGH-INTENSITY STATIN FOR SECONDARY PREVENTION OF MYOCARDIAL INFARCTION IN EMIRATI PATIENTS: A TWO CENTER EXPERIENCE

Category: Prevention

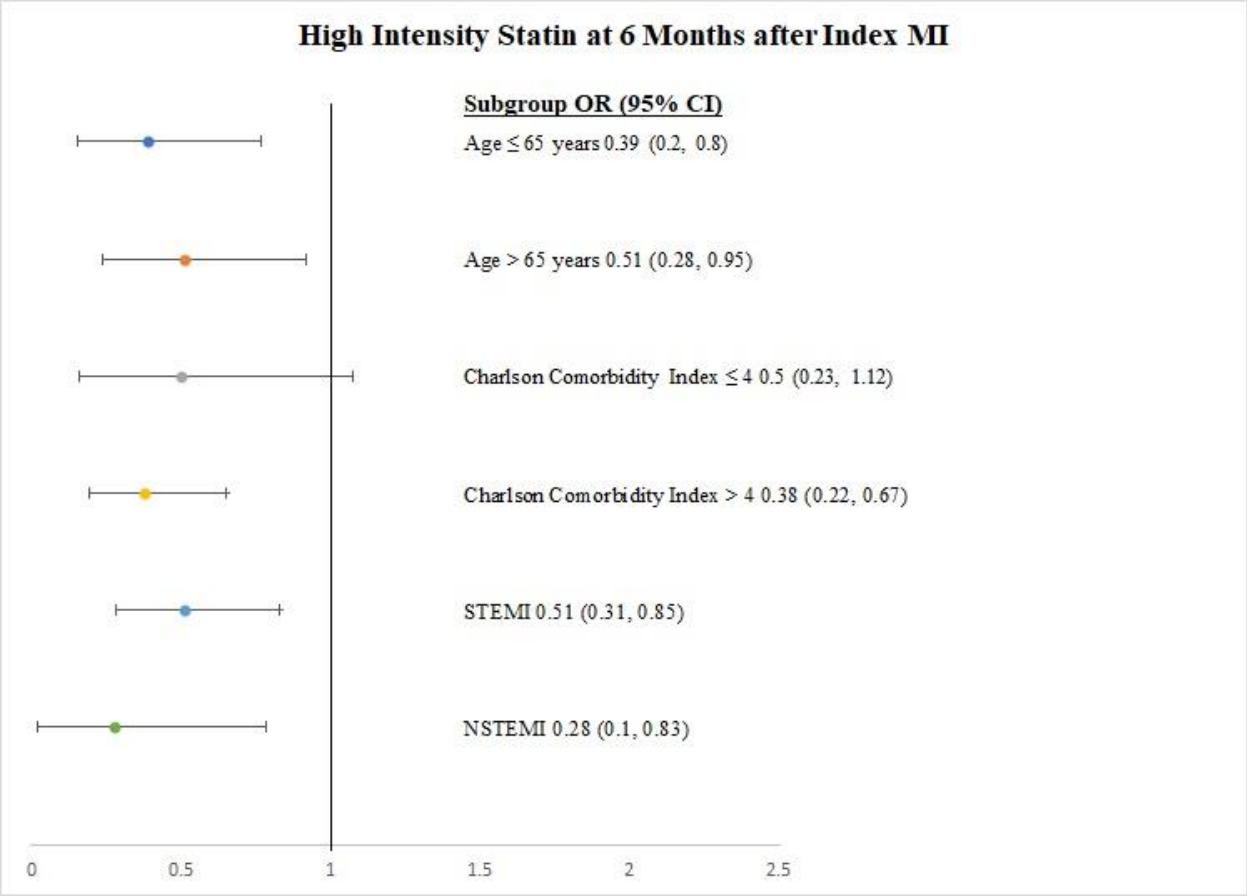
Abstract

BACKGROUND: High-intensity statins are crucial secondary prevention measures of myocardial infarction (MI), as they have consistently been shown to reduce cardiovascular (CV) events following MI. There is strong evidence to suggest that women receive less than optimal treatment of MI, compared to men. However, gender disparities in the use of high-intensity statin for secondary prevention are not well studied, especially in the Middle East. We aimed to investigate these disparities among the Emirati MI population.

METHOD(S): Using data from the SEHA Cath Lab Registry, we retrospectively enrolled all Emirati adults (age >18 y), admitted with MI, to two large hospitals in Abu Dhabi, from the period of January 2015 to January 2019. Patients with incomplete follow-up and those who died within 6 months of index MI were excluded. Baseline demographics, including age, gender and comorbidities were collected from the registry, while information about statin use at discharge and at 6 months was collected from the hospital pharmacy data. All information was verified from medical records. Logistic regression was used to calculate Odds Ratios (ORs) of high-intensity statin use.

RESULT(S): A total of 530 patients were included. 28.7% were women and 72.3% were men. Women were slightly older (mean age 64.5 vs 60 for men) and had a slightly higher number of comorbidities (Mean Charlson Comorbidity Index 6.9 vs 6.5 for men). Women were less likely to be discharged on a high-intensity statin, with an age and Charlson Comorbidity Index adjusted OR of 0.46 (95% CI: 0.26, 0.64), compared to men. The difference was more evident at 6 months after index MI, women had an age and Charlson Comorbidity Index adjusted OR of 0.39 (95% CI: 0.24, 0.64). This gender gap was more evident in older (> 65 years) patients, with more comorbid conditions (Charlson Comorbidity Index > 4), and those who present with an NSTEMI, as shown in the Figures.

CONCLUSION(S): The above findings suggest that a gender gap, in the use of high-intensity statin for secondary prevention, among the Emirati MI population. Further studies are needed to investigate the causes of these gaps, as these are crucial steps in battling the burden of MI.


High Intensity Statin at 6 Months after Index MI
Subgroup OR (95% CI)
Age ≤ 65 years 0.39 (0.2, 0.8)
Age > 65 years 0.51 (0.28, 0.95)
Charlson Comorbidity Index ≤ 4 0.5 (0.23, 1.12)
Charlson Comorbidity Index > 4 0.38 (0.22, 0.67)
STEMI 0.51 (0.31, 0.85)
NSTEMI 0.28 (0.1, 0.83)
0
0.5
1
1.5
2
2.5