Abstract: P2106

Characteristics and management of post-acute coronary syndrome acute heart failure patients in Indonesia

Authors:
AF Sunjaya¹, AP Sunjaya¹, A Priyana², ¹Tarumanagara University, Faculty of Medicine - Jakarta - Indonesia, ²Tarumanagara University-Cengkareng General Hospital, Department of Cardiology - Jakarta - Indonesia,

Topic(s):
Acute Heart Failure – Epidemiology, Prognosis, Outcome

Citation:
This study was funded by the Directorate of Research, Tarumanagara University

Background

Acute Coronary Syndrome (ACS) is the leading cause of heart failure (HF) in the world today, including Indonesia. Acute HF post-ACS have been linked with adverse outcomes and increased mortality rates in previous studies. Even so, while acute HF post-ACS have been described in several large scale epidemiological studies in the West, few studies in Indonesia have described this important complication of ACS.

Purpose

This study aims to compare the characteristics and management of post-ACS patients with and without acute heart failure in Indonesia.

Methods

A retrospective non-randomized cohort study was conducted involving ACS patients at Cengkareng General Hospital admitted from 1 January – 31 December 2016.

Results

A total of 145 ACS patients (mean age 56±9 years) were admitted, most of them male (81.4%), overweight and obese (59.4%), and suffer from STEMI (71%). Thirteen patients (8.9%) had HF prior to ACS and were excluded from analysis. Fifty-seven patients (43.2%) suffer from acute HF post-ACS, most of which were male (78.9%), hypertensive (61.4%) and with STEMI (73.7%). Only 6 patients (10.5%) had a known history of dyslipidemia and had a history of statin prescription. Diabetes was found in 33.3% of patients. When compared with non-acute HF post-ACS patients, acute HF post-ACS patients did not show significant differences in the prevalence of diabetes, hypertension, dyslipidemia and history of statin use. Even so, significantly higher prevalence of overweight and obesity (70.2% vs 51%, p-value <0.05) were found in the acute HF group. Surprisingly, significantly lower LDL levels were found in the acute HF group (mean LDL 108±33 mg/dL vs 125±40 mg/dL, p-value 0.048). No significant differences in anti-hypertensive, β-blocker, antiplatelet/anti-coagulant and statin prescription was found between both groups. Rates of fibrinolytic use and percutaneous coronary intervention also did not significantly differ between both groups. However, those with acute HF were at significantly higher risk of recurrent myocardial infarction (Relative Risk 2.016, 95% Confidence Interval 1.414-2.874, p-value 0.005). They also have a higher risk of cardiogenic shock, acute lung edema and mortality although these were non-significant. Significantly higher GRACE risk score results (p-value 0.005), higher percentage with high risk score (50.9% vs 26.7%, p-value<0.05) were found in the acute HF group as well as risk of in-hospital (p-value 0.008), 6 months (p-value 0.007), 1 year (p-value 0.004) and 3 year (p-
Abstract:
P2106
Characteristics and management of post-acute coronary syndrome acute heart failure patients in Indonesia

Authors:
AF Sunjaya 1, AP Sunjaya 1, A Priyana 2
1 Tarumanagara University, Faculty of Medicine - Jakarta - Indonesia,
2 Tarumanagara University-Cengkareng General Hospital, Department of Cardiology - Jakarta - Indonesia,

Topic(s): Acute Heart Failure – Epidemiology, Prognosis, Outcome

Citation:
Funding Acknowledgements:
This study was funded by the Directorate of Research, Tarumanagara University

Background
Acute Coronary Syndrome (ACS) is the leading cause of heart failure (HF) in the world today, including Indonesia. Acute HF post-ACS have been linked with adverse outcomes and increased mortality rates in previous studies. Even so, while acute HF post-ACS have been described in several large scale epidemiological studies in the West, few studies in Indonesia have described this important complication of ACS.

Purpose
This study aims to compare the characteristics and management of post-ACS patients with and without acute heart failure in Indonesia.

Methods
A retrospective non-randomized cohort study was conducted involving ACS patients at Cengkareng General Hospital admitted from 1 January – 31 December 2016.

Results
A total of 145 ACS patients (mean age 56±9 years) were admitted, most of them male (81.4%), overweight and obese (59.4%), and suffer from STEMI (71%). Thirteen patients (8.9%) had HF prior to ACS and were excluded from analysis. Fifty-seven patients (43.2%) suffer from acute HF post-ACS, most of which were male (78.9%), hypertensive (61.4%) and with STEMI (73.7%). Only 6 patients (10.5%) had a known history of dyslipidemia and had a history of statin prescription. Diabetes was found in 33.3% of patients. When compared with non-acute HF post-ACS patients, acute HF post-ACS patients did not show significant differences in the prevalence of diabetes, hypertension, dyslipidemia and history of statin use. Even so, significantly higher prevalence of overweight and obesity (70.2% vs 51%, p-value <0.05) were found in the acute HF group. Surprisingly, significantly lower LDL levels were found in the acute HF group (mean LDL 108±33 mg/dL vs 125±40 mg/dL, p-value 0.048). No significant differences in anti-hypertensive, ß-blocker, antiplatelet/anti-coagulant and statin prescription was found between both groups. Rates of fibrinolytic use and percutaneous coronary intervention also did not significantly differ between both groups. However, those with acute HF were at significantly higher risk of recurrent myocardial infarction (Relative Risk 2.016, 95% Confidence Interval 1.414-2.874, p-value 0.005). They also have a higher risk of cardiogenic shock, acute lung edema and mortality although these were non-significant. Significantly higher GRACE risk score results (p-value 0.005), higher percentage with high risk score (50.9% vs 26.7%, p-value<0.05) were found in the acute HF group as well as risk of in-hospital (p-value 0.008), 6 months (p-value 0.007), 1 year (p-value 0.004) and 3 year (p-value 0.017) mortality rates.

Conclusion
ACS patients with acute HF have a significantly higher risk of recurrent myocardial infarction, worse GRACE risk score, GRACE risk category and a higher risk of future mortality compared with those without acute HF.